

EXAMINING CHINESE NON-CRUISERS' IMAGES AND CONSTRAINTS  
TOWARDS CRUISING

A Thesis

by

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## ABSTRACT

This study examined Chinese non-cruisers' images and constraints towards cruising. Seven hypotheses were proposed to explore the relationships among images of cruising, cruise constraints, desire, intention and socio-demographics. Both qualitative and quantitative methodologies were utilized. Based on the literature review, semi-structured interviews were first conducted to determine measurement items for constructs of interest. A convenience sample was then used to collect quantitative data for testing the proposed hypotheses.

Factor analysis involved three scales including affective images of cruising, cognitive images of cruising and cruising constraints. Two factors, positive images and negative images, were found in the scale of cognitive images of cruising, and five factors – intrapersonal constraints, not an option, structural constraint, time constraints and psychological constraints – resulted from the scale of cruising constraints. However, no dimension resulted in the scale of affective images of cruising.

Among the seven tested hypotheses, five of them were supported and two were rejected by the data. The results showed that: 1) images of cruising were negatively correlated with cruising constraints; 2) images of cruising had positive effects on desire to cruise; 3) cruising constraints had negative effects on both desire and intention; 4) demographics variables had no significant effects on either images of cruising or cruising constraints. Based on the results of this study, both theoretical and practical implications were suggested, and directions for future research were recommended.

## DEDICATION

To my parents, Haiquan Zou and Xiaoling Wu,  
who are the best parents and unconditionally love and support me

and

To my beloved fiancé, Ya Wang (Tony).  
It is your perseverance that makes everything possible.  
It is your encouragement that makes me confident.  
It is your love that makes my life wonderful.

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## CHAPTER I

### INTRODUCTION

#### **Study Background**

With an average annual growth rate of 7.6% in the number of passengers, the cruise industry is considered to be an exciting growth category in the leisure market (Cruise Lines International Association [CLIA], 2011). More excitingly, the global cruise industry has witnessed a dramatic boom in China, as it is reported that international cruise destinations from China in 2011 had increased by around 50% compared to 2010 (Cruise Market Watch, 2012). With continued growth in the number of Chinese middle- and upper-income class citizens, the number of China's outbound tourists is estimated to be over 100 million in 2014 (China Tourism Academy, 2013). Given that cruise vacations are becoming favored by the Chinese, China is estimated to become the second largest cruise market after the U.S. by the year of 2017, according to the Global Trends Report released by Euromonitor International (2013).

Seeing China as a profitable market, some ambitious international cruise lines are knocking hard on China's door as a source market. As the first Western cruise line in China, Costa Cruises is replacing a 1,700-passenger vessel with the 2,400-passenger Costa Victoria in May, 2014. In addition, Royal Caribbean International, who has already operated 49 sailings in the country, is adding Xiamen as its fourth homeport

(Tunney, 2011). At the same time, Carnival Corporation & plc has announced the introduction of the Princess Cruise brand to China in 2014.

Some cruise lines have already started to have success in China. For instance, the number of Royal Caribbean's Chinese passengers has increased from 25,000 in 2011 to 100,000 in 2012, and Royal Caribbean is expecting the number to be doubled in the following years (Shankman, 2013).

Despite the astonishing prospects for the cruise industry in China, Asia currently is not a major source market and only accounts for 6-7% of cruise passengers in the global cruise industry (Euromonitor International, 2013). Although the rapid growth of the cruise market shows that Chinese tourists are interested in cruising, cruise vacations still have a relatively low market penetration compared to other vacation products. Several things can provide possible explanations for this phenomenon: 1) the cruise industry in China is in its infancy stage, and potential customers may have misperceptions of cruise vacations; 2) cruising might be perceived as relatively more expensive than other vacation products; 3) the lack of annual vacations means potential customers have insufficient time to take a cruise which typically lasts for more than 4 days; and/or 4) limited cruise infrastructure in China might be constraining the expansion of the cruise industry, and subsequently constrains tourists' choices.

The reasons listed above are likely only part of the many constraints that keep potential cruisers from taking a cruise or prioritizing taking a cruise when choosing a vacation product. Therefore, unveiling potential cruisers' images and constraints of

cruising is likely vital for understanding the discrepancy between being interested in cruising and actual product purchase.

Hudson (1999) asserted that it is crucial to understand nonusers as tourism companies have to draw new customers if they want to thrive, or sometimes survive. However, it is usually difficult to conduct research on noncustomers because of the high cost and difficulty to locate them. Thus, the tourism literature has been mostly focused on current tourists with few studies examining the reasons why potential tourists do not choose certain types of vacation (Park and Petrick, 2009).

While the majority of tourism studies have emphasized the importance of understanding why tourists behave the way they do, there is a lack of research on why potential tourists do not make certain travel decisions (Park, 2006). Particularly for the cruise industry, the existing literature provides limited theoretical frameworks for explaining the non-cruisers' psychological behaviors when deciding whether to purchase a certain vacation. This implies that more efforts are needed to further understand non-cruisers both theoretically and practically.

### **Study Objectives**

Based on the above, related research questions include: a) who these non-cruisers are, b) why some people do not cruise, and c) what can be done to attract this group to purchase cruise vacations. Therefore, the primary purpose of this study is to enhance the understanding of the non-cruiser market in China and to provide managerial and

marketing implications for the cruise industry to take advantage of this potential market. This will hopefully be achieved by examining how non-cruisers feel and think about a cruise vacation and what factors inhibit them from purchasing a cruise vacation.

The objectives of this study are therefore threefold: 1) to document Chinese non-cruisers' images of cruising; 2) to identify non-cruisers' perceived constraints to cruising; and 3) to theoretically examine the relationships among the interested constructs (i.e., images of cruising, cruise constraints, desire, intentions to cruise and socio-demographics).

### **Definition of Key Variables**

**Non-Cruisers:** persons who have never purchased a cruise vacation.

**Travel Constraints:** factors which inhibit continued traveling, cause inability to start traveling, result in the inability to maintain or increase frequency of travel, and/or lead to negative impacts on the quality of a travel experience (Hung and Petrick, 2010).

**Intrapersonal Constraints:** factors that interact with leisure preferences and refer to psychological conditions of an individual including their personality, interest and attitude toward leisure activities (Crawford and Godbey, 1987).

**Interpersonal Constraints:** factors that interact with both leisure preferences and participation related to the interaction between a potential leisure participant and others, such as family and friends (Crawford and Godbey, 1987).

**Structural Constraints:** intervening factors between leisure preferences and participation which are external factors in the environment, such as lack of time, money, opportunities, information and access, and bad weather (Crawford and Godbey, 1987).

**Images of Cruising:** the sum of perceptions and feelings toward cruising (modified from Park, 2006).

**Affective Image:** subjective feelings or emotional responses of individuals toward an object (Gartner, 1994).

**Cognitive Image:** knowledge or beliefs of an object (Gartner, 1994).

**Desire:** the motivational state of mind wherein appraisals and reasons to act are transformed into a motivation to do so (Perugini and Bagozzi, 2001).

**Intention:** potential cruisers' perceived likelihood of purchasing a cruise vacation within a certain period of time.

## CHAPTER II

### LITERATURE REVIEW AND CONCEPTUAL MODEL

#### **Destination Image**

The concept of image was arguably first examined by Boulding (1956) and Martineau (1958) as both proposed that human behavior depends upon image rather than objective reality. Almost three decades later, the image concept was introduced to tourism studies and termed as destination image (Hunt, 1975). Since then, a wealth of destination image literature has been established, and in recent years, destination image has become one of the most prevalent topics in the tourism field (Pan and Li, 2011).

The majority of tourism scholars have argued that destination image has a critical influence on travel decision making (Beerli and Martin 2004). During the decision-making process, tourists usually rely on their perceptions of a destination's image, especially for places they have never visited before. Such perceptions are formed from various information sources as well as tourists' own interpretations, and thus, their perceptions may not necessarily reflect objective reality (Baloglu and McCleary, 1999b). As most potential tourists have only limited knowledge about preferred destinations before actually visiting, destinations often compete only via images (Pike and Ryan, 2004).

Reviewing 142 destination image articles, Pike (2002) summarized several trends of destination image research: 1) few studies had attempted to measure destination

image for any specific travel context; 2) North America was the most popular studied region; and 3) less than half of the papers utilized qualitative methods at any stage of the research.

Gallarza, Saura, and García (2002) also pointed out the difficulties faced by destination image scholars, including the complexity of the tourism product and the intangibility of tourism services which can hinder image assessment as they depend on invisible elements. Thus, in order to enrich the destination image literature, more studies need to be conducted outside North America and which incorporate qualitative methods to measure destination image in specific travel contexts.

### ***Conceptualization of Destination Image***

As more scholars have been devoted to the conceptualization of destination image, a number of ways to define destination image have emerged. It has been explained as a mental construct developed by selected impressions (Reynolds, 1985; Fakeye and Crompton, 1991), as an expression of knowledge, prejudice, impressions, imaginations, and emotional thoughts (Lawson and Bond-Bovy, 1977), and as the sum of belief, ideas, and impressions (Crompton, 1979; Kotler *et al.*, 1994). Pointing out that past definitions were too vague and unlikely to be effective, Echtner and Ritchie (1991) proposed a more comprehensive definition of destination image based on three dimensions: attributes-holistic, functional-psychological, and common-unique. Although there is yet to be a unified definition of destination image (Gallarza, Saura, and García, 2002), it has mostly referred to travelers' total perceptions, evaluations and attitudes

towards a destination, containing cognitive and affective appraisals (Park and Petrick, 2009).

Attempts to conceptualize destination image can be traced back to Gunn's (1972) work, which suggested two dimensions of image: organic and induced. The former refers to the beliefs or impressions toward a destination based on the information gained from sources other than those being promoted by the destination, whereas the latter refers to the images being promoted by a destination through marketing activities.

However, it is practically difficult to distinguish induced image and organic image. Thus, Fishbein and Ajzen (1975) instead emphasized the importance of distinguishing between an individual's beliefs and attitudes. They argued that beliefs represent information held about an object while attitudes are a favorable or unfavorable evaluation of the object. This emphasis subsequently led to Gartner's (1994) proposition of three constructs of destination image: cognitive, affective and conative images. In this conceptualization, cognitive image refers to beliefs or knowledge of a destination, which can be organic or induced; affective image refers to subjective feelings or emotional responses toward a destination; and conative image is related to the behavioral intention of an individual or their likelihood to visit a destination. Gartner (1994) also indicated that the three components are hierarchically interrelated: cognitive image is an antecedent of affective image (Russell and Pratt, 1980; Stern and Krakover, 1993) and both cognitive and affective images influence behavioral intention, namely conative image.



Most studies tend to agree that destination image has at least two main components: cognitive and affective images (Baloglu and McCleary, 1999a; Beerli and Martin, 2004), and that conative image is set aside as a separate construct (i.e., travel or behavioral intention) beyond the concept of destination image (Chen, Hua and Wang, 2013). Several disciplines and fields have also generally reached a consensus that the concept of image has both perceptual/cognitive and affective evaluations (Baloglu and McCleary, 1999b). For instance, in the field of environmental psychology, the concept of environmental meaning is measured based on its two components – perceptual/cognitive and affective meanings (Lynch, 1960; Russell and Pratt, 1980; Hanyu, 1993). Furthermore, Baloglu and McCleary (1999b) added a third component of destination image – overall image, which was defined as a result of both perceptual/cognitive and affective evaluations. In their empirical study (Baloglu and McCleary 1999b), they found that both perceptual/cognitive and affective images significantly influences the overall image of a destination.

### ***Measurements of Destination Image***

Since destinations possess their own characteristics and tourists may have different perceptions, the range of cognitive image attributes varies across different destinations and tourists (Kim, 1998). The use of destination guidebooks or brochures to generate initial lists of image items has been adopted by many tourism scholars (Baloglu and McCleary, 1999b; Beerli and Martin, 2004). Other qualitative methods, such as focus groups (Chen and Kerstetter, 1999), in-depth interviews (Hung, 2008), content

analysis (Pike and Ryan, 2004) and Zaltman Metaphor Elicitation Technique (Park, 2006), all in conjunction with the use of literature reviews, have also been used to determine cognitive attributes. The initial list of attributes then has typically been compiled and pre-tested with a convenience sample, followed by factor analysis to reduce items (e.g., Driscoll, Lawson, and Niven, 1994; Baloglu and McCleary, 1999b; Chen and Kerstetter, 1999).

An extensive literature review by Echtner and Ritcher (1993) indicated that destination image studies have been limited to examining perceptual or cognitive components, which may pose some problems for conceptualizing and measuring image because “the meaning of a place is not entirely determined by the physical properties of that place” (Ward and Russell, 1981). Russell and Pratt (1980) went beyond the use of cognitive images and developed a four-item scale to measure affective image utilizing the following semantic differential items: “Arousing-Sleepy”, “Exciting-Gloomy”, “Pleasant-Unpleasant”, and “Relaxing-Distressing.” This scale has been frequently used by tourism scholars. In her dissertation, Hung (2008) used nine semantic differential items (i.e., “Arousing-Sleepy”, “Exciting-Gloomy”, “Pleasant-Unpleasant”, “Relaxing-Distressing”, “Enjoyable-Not enjoyable”, “Comforting-Uncomforting”, “Calming-Annoying”, “Fun-Boring”, and “Adventurous-Unadventurous”) which were developed from in-depth interviews and the use of an expert panel to create a measure for the affective images of cruise vacations.

Methodologies to examine destination image have included both qualitative and quantitative methods. Although some qualitative methods such as free-elicitation (Reilly, 1990), focus groups along with literature reviews and interviews (Baloglu and McCleary, 1999b; Fakeye and Crompton, 1991), and repertory grid method (Pike, 2003; Pike and Ryan, 2004) have been used, most destination image studies have used quantitative methods (Pike, 2002). A number of scales for determining the different attributes of perceived image have been proposed by several researchers (Baloglu and McCleary, 1999b; Fakeye and Crompton, 1991; Walmsley and Jenkins, 1993), but most have failed to establish validity and reliability (Beerli and Martin, 2004). Two exceptions include the scales developed by Echtner and Ritchie (1993) and Baloglu and McCleary (1999b). Additionally, Echtner and Ritchie (1991) contended that structured methods alone are not enough to capture the unique and holistic components of image, and argued that to fully obtain the components of destination image, a combination of structured and unstructured methodologies must be used.

### ***Socio-demographics and Destination Images***

It is well established that socio-demographic characteristics (e.g., age, income and education) can have a significant influence on the formation of destination image (Baloglu and McCleary, 1999; Beerli and Martin, 2004; Woodside and Lysonski, 1989; Um and Crompton, 1990; Chen and Kerstetter, 1999). Factors pertaining to socio-demographic characteristics that have been found to influence destination image include: age (Walmsley and Jenkins, 1993; Baloglu and McCleary, 1999; Husbands, 1989),

education (Stern and Krakover, 1993; Beerli and Martin, 2004; Baloglu and McCleary, 1999), gender (Walmsley and Jenkins, 1993; Chen and Kerstetter, 1999), income and marital status (Baloglu, 1997; Calantone *et al.*, 1989). Thus, for the current study, it is hypothesized that:

**H6a: *Socio-demographic variables (i.e., age, gender, education, marital status and income) have a significant effect on Affective Images of Cruising.***

**H6b: *Socio-demographic variables (i.e., age, gender, education, marital status and income) have a significant effect on Cognitive Images of Cruising.***

### **Leisure and Travel Constraints**

Travel motivation, as a fundamental force that drives travel decision-making, has been extensively studied, but empirical studies are rather limited on understanding why people do not travel even though they express the desire to travel. It is postulated that there are certain constraints keeping people who have travel motivations from traveling. As indicated by Dellaert, Ettema and Lindh (1998), constraints are key factors which keep potential tourists from initiating a trip. Therefore, understanding travel constraints is likely a key component in understanding the process of travel decision-making.

#### ***Leisure Constraints***

Constraints to leisure were originally defined as factors which intervene between the preference for an activity and participation (Crawford and Godbey, 1987). As leisure

constraints research progressed, especially the proposed concept of negotiation, the definition of leisure constraints has been broadened. Shaw, Bonen and McCabe (1991) found a positive relationship between constraints and level of participation in their study, challenging the widely accepted assumption that constraints result in leisure non-participation. Based on Shaw *et al.*'s (1991) findings, Raymore *et al.* (1993) extended the definition as factors that not only inhibit but also limit participation in a given leisure pursuit.

With additional outcomes of leisure constraints having been identified, a more specific definition of leisure constraints was proposed by Jackson and Scott (1999). They argued that leisure constraints focus on four types of leisure phenomena: 1) inability to maintain participation at, or increase it to, desired levels; 2) ceasing participation in former activities; 3) nonuse of public leisure services; and 4) insufficient enjoyment of current activities. Modifying Jackson and Scott's (1999) definition, Nadirova and Jackson (2000) proposed that leisure constraints are factors that inhibit the continued use of leisure services, cause an inability to maintain or increase the frequency of participation, and/or lead to negative impacts on the quality of a leisure experience.

The past three decades have witnessed a proliferation of leisure constraints studies. Among these studies, a seminal piece by Crawford and Godbey (1987) has provided a building block for later conceptualizations of leisure constraints. By exploring the three different effects of leisure constraints on the relationships between leisure preferences and participation, Crawford and Godbey (1987) suggested that

leisure constraints are multi-dimensionally constructed and proposed three types of leisure constraints: intrapersonal, interpersonal and structural constraints.

Intrapersonal constraints, as factors interacting with leisure preferences, refer to psychological conditions of an individual including their personality, interest and attitude toward leisure activities. Examples of intrapersonal constraints include stress, anxiety, religiosity, kin and non-kin reference group attitudes.

Interpersonal constraints, as factors interacting with both leisure preferences and participation, relate to the interaction between a potential leisure participant and others, such as family and friends. Being unable to find a friend, family member, or partner to participate with in the activities of interest can thus be categorized as interpersonal constraints.

Finally, structural constraints, as intervening factors between leisure preferences and participation, are external factors in the environment, such as lack of time, money, opportunities, information and access, and bad weather. This conceptualization of leisure constraints as a multidimensional construct has been argued to enable the analysis of constraints in a more systematic manner (Jovanovic *et al.*, 2013).

### ***Travel Constraints***

Based on the leisure constraints literature, travel constraints have been defined as factors which inhibit continued traveling, cause inability to start traveling, result in the inability to maintain or increase frequency of travel, and/or lead to negative impacts on the quality of a travel experience (Hung and Petrick, 2010). Although travel constraints

research began in the 1980s, applying the concept of leisure constraints to tourism contexts is a relatively recent phenomenon.

In the past decade, travel constraints studies have incorporated the concept of leisure constraints as a conceptual model in which travel constraints can be systematically analyzed. A considerable amount of efforts have been made to examine whether the three-dimensional construct model exists in the context of tourism.

Some studies have found full or partial support for the three-dimensional structure (Nyaupane, Morais and Graefe, 2004; Zhang *et al.*, 2012; Jovanovic *et al.*, 2013; Lai *et al.*, 2013), while other studies have suggested that constraints are not three-dimensionally constructed in the context of tourism (Pennington-Gray and Kerstetter, 2002; Hung and Petrick, 2010).

Jovanovic *et al.* (2013) confirmed the three-dimensional structure of constraints in the context of nautical tourism. Similarly, Pennington-Gray and Kerstetter (2002) found that the three types of constraints existed in the context of nature-based tourism. However, they also suggested that people were not constrained by intrapersonal issues in the context of domestic nature-based tourism, and this may be because tourism scholars mechanically used the constraints measurement scales in traditional leisure settings without reasonable adjustments.

In contrast, Nyaupane, Morais and Graefe (2004) compared constraints of three kinds of nature-based activities tourism (i.e., rafting, horseback riding and canoeing), and their results indicated that the three-dimensional model was only partially supported.

Specifically, the results from their study revealed that the importance of each dimension of constraints differed across the three activities for the same group of individuals.

Unlike leisure constraints, travel constraints have been argued to not be homogeneous across different types of tourists and travel activities (Pennington-Gray and Kerstetter, 2002). For instance, in a cruise tourism context, both Hung and Petrick (2010) and Kerstetter, Yen, and Yarnal (2005) found a fourth dimension, Not an Option, which represents an overall lack of interest in cruising as a travel option. In addition, Li *et al.*'s (2011) study reported four constraint factors – structural, cultural, information and knowledge constraints – in the context of Chinese outbound tourism. These findings imply that travel constraints studies shouldn't be directed to the general population or general travel contexts, and should be context-specific.

### ***Socio-demographics and Travel Constraints***

The relationships between travel constraints and socio-demographic variables, such as gender, age and income, have been extensively studied (Kattiyapornpong and Miller, 2009; Li *et al.*, 2011; Jovanovic *et al.*, 2013). Hudson (2000) found that male and female skiers perceived constraints differently, with females perceiving higher levels of intrapersonal constraints than males. Li *et al.* (2011) found that constraints differed according to socio-demographic characteristics and found that age and educational background were the most influential factors. Similarly, Kattiyapornpong and Miller (2009) suggested that income constrains different visitors travel behavior differently.



Conversely, Jovanovic *et al.* (2013) found that income and education were significant predictors of perceived constraints while gender, age and marital status did not show any significant influences. However, it is worth noting that Jovanovic *et al.*'s study was based on a convenience sample, and the generalization of the results is likely limited. To sum up, it is reasonable to hypothesize that:

**H7: Socio-demographic variables (i.e., age, gender, education, marital status and income) have a significant effect on *Cruising Constraints*.**

#### ***Destination Image and Travel Constraints***

Crompton (1979) asserted that destination choice is constraint-driven, and several studies have reported image to be a barrier to visitation and/or participation (LaPage and Cormier, 1976; Prince and Schadla-Hall, 1985; Williams and Fidgeon, 2000). Along with the proposition of a three dimensional model of leisure constraints, Crawford and Godbey (1987) indicated that intrapersonal, interpersonal and structural constraints “hierarchically influence leisure activity preference and participation.” This led to Crawford, Jackson and Godbey’s (1991) hierarchical constraint model.

Crawford *et al.* (1991) suggested that leisure preferences are first formed when intrapersonal constraints are absent or negotiated through some combinations of privilege and exercises of the human will. Then depending on the type of activities, interpersonal constraints are encountered, which could happen in activities requiring at least one partner. It is only when these types of constraints have been overcome that

structural constraints begin to be encountered. Finally, participation results in the absence of structural constraints, or if these constraints are negotiated.

From the hierarchical constraints model, it has been purported that intrapersonal constraints are the most powerful constraints because they limit the development of preference (Crawford *et al.*, 1991). As aforementioned, intrapersonal constraints are related to psychological conditions of an individual including their personality, interest and attitude toward leisure activities (Crawford and Godbey, 1987), which can be partly analogous to affective images in the concept of destination image. Thus, it is argued that there is an implicit link between destination image and travel constraints.

However, considering the important role of destination image, mental states related to the image of the leisure activities as part of predisposition seem to be neglected in intrapersonal constraints. Leisure constraints literature can be complemented by studies on destination image (Park and Petrick, 2009), but the integration of the leisure constraint concept to the study of destination image has been argued to be relatively limited (Hung, 2008). To the best of the author's knowledge, only two studies have investigated the relationship between destination image and travel constraints. One of them is Botha, Crompton, and Kim (1999) who found a significant influence of structural constraints on destination choices and argued that structural constraints were essential in determining final destination choice from the late consideration set of destination choices. The other one is Chen, Hua and Wang (2013)

who found a significant relationship between destination image and travel constraints.

Thus, it is hypothesized that:

**H1a: *Affective Images of Cruising* have a significant effect on *Cruising Constraints*.**

**H1b: *Cognitive Images of Cruising* have a significant effect on *Cruising Constraints*.**

### **Desire and Intention**

Behavioral intentions can be defined as an individual's anticipated or planned future behavior (Lam and Hsu, 2006). The concept of intention has been recognized as a critical factor highly related to actual behavior (Baloglu, 2000), and it is sometimes considered more effective than behavior to comprehend a human's psychological state (Jang *et al.*, 2009), because customers may make a purchase decision because of constraints instead of real preference such as time and location convenience, lack of substitutes, and promotions (Day, 1969). Several models, such as Theory of Reasoned Action (Fishbein and Ajzen, 1975), Theory of Planned Behavior (Ajzen, 1991) and Model of Goal-Directed Behavior (Perugini and Bagozzi, 2001), have emphasized intention as an immediate determinant of actual actions. However, given the important role of intention in predicting behavior, intention has been one of the least researched concepts of tourism (Jang *et al.*, 2009).

Desire has been defined as “a state of mind wherein appraisals and reasons to act are transformed into a motivation to do so” (Perugini and Bagozzi, 2001, p. 84). In the

field of decision-making and attitudes, the concepts of desire and intention have not been differentiated, but often treated as synonyms. According to Perugini and Bagozzi (2004), desire is the first step toward a decision to act, which is usually followed by intention, and desire is specifically distinctive from the concept of intentions in terms of “perceived performability, action-connectedness and temporal framing” (Perugini and Bagozzi, 2004, p. 69).

Compared to intention, desire is related less to performability, connected less to actions and enacted over a longer time frames. For example, a potential tourist who strongly desires to visit a destination but has some barriers (e.g., lack of time and money) might not intend to visit. In contrast, a business traveler may not desire to travel to attend a conference but he/she still intends to travel because of work. Distinguishing desire from intention can thus provide some meaningful implications for destination marketers. By identifying potential tourists’ levels of desire and intention to visit, destination marketers can therefore reevaluate their marketing campaigns and shift emphases in order to address either desire or intention problems.

Generally speaking, desire is a direct impetus for intention since motivation is more likely to be transformed to actual behavior through a strong desire. In the Model of Goal-directed Behavior (MGB) proposed by Perugini and Bagozzi (2001), and supported by Park (2006), positive attitude alone is insufficient for arousing intention, and desire positively influences intention. However, the concept of desire has received scant

attention from tourism scholars and very few studies have applied this concept to a tourism context (Hsu and Crotts, 2006; Park, 2006). Thus, it is hypothesized that:

**H2: *Desires* positively influence *Intention*.**

### ***Destination Image and Desire***

Many studies have explored the relationship between destination image and travel intention. In general, scholars have agreed that destination image plays an important role during the process of travel decision-making, especially in forming intentions to visit the destination (Baloglu, 2000; Chen and Kerstetter, 1999; Woodside and Lysonski, 1989; Chen, Hua and Wang, 2013). Particularly, Lee *et al.* (2005) found a positive relationship between destination image and travel intention, and concluded that the more favorable the destination image is, the more likely the potential tourists will intend to visit.

This has been found to be more evident among potential travelers who have limited knowledge about a destination before visiting (Crompton, 1979; Echtner and Ritchie, 1991; Asli and Gartner, 2007). Further, Chen and Tsai (2007) contended that destination image appears to have the most important effect on behavioral intention.

Studies have also shown that desire plays an important role in explaining the process of decision-making (Bagozzi and Dholakia, 2002; Perugini and Conner, 2000; Perugini and Bagozzi, 2001). In the tourism field, a few studies have investigated the relationship between desire and destination image, including Park's (2006) work which

found that images of cruise vacations significantly influence desire to take a cruise vacation. While few studies have focused on the relationship between desire and destination image, substantial studies have shown that destination image and psychological motivation, which can be analogous to the concept of desire, are highly related (Baloglu and McCleary, 1999b; Mill and Morrison, 1985). Therefore, it is believed to be reasonable to hypothesize that:

**H3a: *Affective Images of Cruising significantly influence Desire to cruise.***

**H3b: *Cognitive Images of Cruising significantly influence Desire to cruise.***

#### ***Travel Constraints, Desire and Intention***

To better understand non-users, it is worth looking at how constraints are related to behavioral intentions (Park and Petrick, 2009). As many tourism scholars have found that travel constraints significantly affect traveler intentions to visit (Woodside and Lyonski, 1989; Um and Crompton, 1999), it is reasonable to infer that constraints, especially intrapersonal constraints which influence people's motivation, can lead to non-participation (Park and Petrick, 2009).

However, some studies have found that the level of perceived constraints is positively associated with frequency of participation (Pennington-Gray and Kerstetter, 1999; Shaw, Bonen and McCabe, 1991), as Shaw *et al.* (1991) contended that the more constraints one encountered, the more intention will be aroused and thus more actions will be taken to negotiate constraints. Yet, it has been argued that participants and non-

participants have different perceptions of constraints, for participants are likely to be more aware of potentially encountered constraints than non-participants (Aas, 1995). This is evident in the work of Aas (1995) and Raymore (2002). Aas (1995) found that participants reported stronger constraints than nonparticipants. Raymore (2002) suggested that nonparticipants who perceived a high level of constraints reported that they would not participate even if those constraints were removed. Such debate implies that the relationship between constraint and intention is worth further efforts, and thus, it is hypothesized that for non-cruisers:

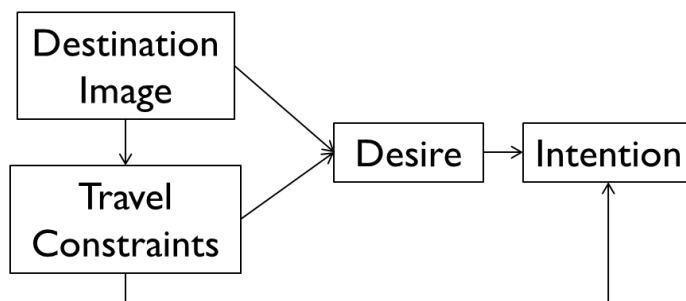
**H4: *Cruising Constraints* negatively influence *Intentions*. The more constraints a person perceives, the less likely the person would intend to take a cruise.**

Recalling the three dimensions of leisure constraints, intrapersonal constraints are crucial to preference formation, whereas structural and interpersonal constraints directly affect actual participation. In other words, intrapersonal constraints may have an effect on desire while interpersonal and structural constraints may influence intention. Therefore, it is reasonable to further hypothesize that travel constraints, especially intrapersonal constraints, have a significant effect on desire. Thus, it is hypothesized that:

**H5: *Cruising Constraints* negatively influence *Desire*. The more constraints a person perceives, the less likely the person would desire to take a cruise.**

## Conceptual Framework

One of the objectives of this study is to theoretically explore the relationships between images of cruising and cruise constraints. A conceptual framework is presented to better display the proposed relationships among the interested variables (**Figure 1**). Based on the aforementioned, destination image and travel constraints are postulated to be correlated. Specifically, affective image may influence intrapersonal constraints and cognitive image may affect structural and interpersonal constraints. Both destination image and travel constraints are proposed to have a role in arousing desire, which further positively influences travel intention. Last but not least, it is argued that travel constraints, especially structural and interpersonal constraints, are related to travel intention. Due to limitations in the author's statistical abilities, this study will not test the conceptual model as a whole but only test the six proposed hypotheses univariately. (**Table 1**).



**Figure 1** *Conceptual Framework for the Study*



**Table 1** *Hypotheses and Related Literature*

<b>Hypotheses</b>	<b>Literature</b>
H1a: <i>Affective Images of Cruising</i> have a significant effect on <i>Cruising Constraints</i> . H1b: <i>Cognitive Images of Cruising</i> have a significant effect on <i>Cruising Constraints</i> .	Botha, Crompton and Kim, 1999 Chen, Hua and Wang, 2013
H2: <i>Desire</i> positively influences <i>Intention</i> . H3a: <i>Affective Images of Cruising</i> significantly influence <i>Desire</i> . H3b: <i>Cognitive Images of Cruising</i> significantly influence <i>Desire</i> .	Park, 2006; Perugini and Bagozzi, 2001  Lee <i>et al.</i> , 2005 Chen and Tsai, 2007
H4: <i>Cruising Constraints</i> negatively influence <i>Intention</i> . The more constraints a person perceived, the less likely the person would intent to take a cruise.	Hung and Petrick, 2012
H5: <i>Cruising Constraints</i> negatively influence <i>Desire</i> . The more constraints a person perceived, the less likely the person would desire to take a cruise.	Inferred from three-dimensional constraint model (Crawford and Godbey, 1987)
H6a: <i>Socio-demographic</i> variables have a significant effect on <i>Affective Images of Cruising</i> . H6b: <i>Socio-demographic</i> variables have a significant effect on <i>Cognitive Images of Cruising</i> .	<ul style="list-style-type: none"> <li>• Income and marital status: Baloglu, 1997;</li> <li>• Gender: Walmsley and Jenkins, 1993;</li> <li>• Age and education: Baloglu and McCleary, 1999(b).</li> </ul>
H7: <i>Socio-demographic</i> variables have a significant effect on <i>Cruising Constraints</i> .	<ul style="list-style-type: none"> <li>• Income: Kattiyapornpong and Miller, 2009; Fleischer and Pizam, 2002;</li> <li>• Gender: Hudson, 2000;</li> <li>• Age and education: Li <i>et al.</i>, 2011;</li> </ul>

Although no specific relationship between destination image and travel constraints has been examined, based on the conclusions of both Botha, Crompton and Kim (1999), and Chen, Hua and Wang (2013), it is hypothesized:

**H1a: *Affective Images of Cruising have a significant effect on Cruising Constraints.***

**H1b: *Cognitive Images of Cruising have a significant effect on Cruising Constraints.***

Furthermore, Lee *et al.* (2005) found a positive influence of destination image on intention, while Chen and Tsai (2007) found an indirect effect of destination image on intention. Since Perugini and Bagozzi (2004) argued that desire is an important impetus of intention, which also has been empirically found by Park (2006), it is hypothesized that:

**H2: *Desire positively influences Intention.***

**H3a: *Affective Images of Cruising significantly influence Desire to cruise.***

**H3b: *Cognitive Images of Cruising significantly influence Desire to cruise.***

The results of Hung and Petrick's (2012) work indicated that cruise constraints have a negative effect on intentions to cruise. Meanwhile, recalling the three dimensions of leisure constraints, intrapersonal constraints may have an effect on desire. Responding to the call for examination of the hypothesis in different contexts, it is hypothesized that:

**H4: *Cruising Constraints* negatively influence *Intention*. The more constraints a person perceived, the less likely the person would intent to take a cruise.**

**H5: *Cruising Constraints* negatively influence *Desire*. The more constraints a person perceives, the less likely the person would desire to take a cruise.**

Last but not least, as various studies have shown a significant effect of different socio-demographics on destination image and travel constraints, it is hypothesized in cruise tourism:

**H6a: *Socio-demographic* variables (i.e., age, gender, education, marital status and income) have a significant effect on *Affective Images of Cruising*.**

**H6b: *Socio-demographic* variables (i.e., age, gender, education, marital status and income) have a significant effect on *Cognitive Images of Cruising*.**

**H7: *Socio-demographic* variables (i.e., age, gender, education, marital status and income) have a significant effect on *Cruising Constraints*.**

## CHAPTER III

### METHODOLOGY

#### **Study Area**

Travel markets are comprised of customers who have interest as well as ability to travel, and these people mostly live in cities, making cities the primary sources of travelers (Gunn, 1994). Guangzhou, the third largest city in China, is believed to be a good area for this study for the following reasons. First, Guangzhou is one of the most affluent cities in China, indicating that people living in Guangzhou are more likely to have sufficient disposal income for travel or vacations.

A second reason is that Guangzhou is a key national transport hub and trading port as it has waterways, railways, expressways and airlines as well as three intersecting rivers. Additionally, Guangzhou is about 75 miles away from Hong Kong, the busiest cruise port in China (**Figure 2**). The aforementioned indicates Guangzhou's potential for becoming a cruise source market. Further, Guangzhou is building a large cruise terminal that has been estimated to cost \$316 million, showing the potential for rapid growth for the cruise industry. Finally, the author was born, grew up and studied tourism management in Guangzhou, meaning there would likely be fewer barriers and more accessibility to conduct the study in Guangzhou.



**Figure 2** *The Location of Guangzhou* (Source: Google Map)

## **Research Design**

A review of literature reveals that there has been limited research on the study objects (i.e. Chinese non-cruisers), and it is likely that Chinese non-cruisers have significantly different images of cruising in comparison to their counterparts in North America. Additionally, the general Chinese population is relatively less familiar with cruising. As a result, a mixed methodology was utilized in order to obtain a more holistic picture of the topic. The research design of the current study consisted of two phases starting with a qualitative inquiry followed by quantitative methods based on the qualitative findings.

### ***Phase 1: Qualitative Study***

In Phase 1, semi-structured interviews with a small sample were conducted for the purpose of determining measurement items for Phase 2. A convenience sample was selected from the Chinese population in College Station, TX, who had no cruising experience. The sample was divided into two groups: 1) Chinese students who were attending Texas A&M University and had been away from China for less than one year; and 2) parents or relatives from China who were visiting students at Texas A&M University or were coming to the U.S. As for the former group, the condition of having been away from China for less than one year was believed to be essential to ensure that their perception and attitude towards cruising would not be substantially influenced by the popularity of cruising in the U.S. The latter group was set up to enrich the diversity of sample demographics. Also, it was believed that this group was the most ideal target market for cruise companies as their current stay or future trip in the U.S. indicated that they likely had time and money to travel overseas.

Interviews included four sections of information collection: 1) socio-demographics information; 2) images/perceptions of cruising; 3) desires and intentions to take a cruise; and 4) cruise constraints. To capture different components of images of cruising, Echtner and Ritchie's (1993, p.5) three open-ended questions were used: 1) "What images or characteristics come to mind when you think of taking a cruise vacation?" 2) "How would you describe the atmosphere or mood that you would expect to experience while you are on a cruise?" and 3) "Please list any distinctive or unique

tourist attractions that you can think of when you are on a cruise.” These three questions have been widely used in destination image studies (Choi, Chan, and Wu, 1999; Grosspietsch, 2006; Li and Stepchenkova, 2012).

Phase 1 was conducted between March 21st, 2014 and April 4th, 2014. To recruit a convenience sample around campus, snowball sampling was utilized. It has been suggested that snowball sampling is appropriate when the members of a special population are difficult to locate (Babbie, 1992). A total of 15 people (10 students and 5 parents) were recruited. Most interviews (n=13) were face-to-face conversations at various locations including: coffee shops, libraries, seating areas on campus, and informants’ residences with consideration for minimizing interruption, protecting informants’ privacy, and the convenience of interviewees. Only two interviews were conducted online via video chat since the participants were coming to, but were not in the U.S. yet. An interview protocol (**Appendix 1**) comprising a list of open-ended questions and topics was used. Interviews were recorded by using a digital voice recorder with the consent of the interviewees, and the interviews were later transcribed into text and analyzed.

#### *Profile of Interview Participants*

A total of 15 participants were recruited in this phase, including 10 Chinese students and 5 parents from China. All students (10) were single while all parents (5) were married. The numbers of female (7) and male (8) participants were almost equal. The average age of participants was 32.7 ranging from 22 to 55. About half (8) were

from inland areas of China while the other half (7) were from southeast coastal cities, such as Guangzhou (4), Xiamen (2) and Dalian (1). The average duration of the interviews was about 22 minutes, ranging from 10 minutes to 38 minutes. All audio recordings were listened to twice. The first time was to generate interview transcripts of statements and phrases, and the second was to confirm the accuracy of transcription.

The main purpose of phase 1 was to complement measurement items of scales. Thus, the following paragraphs present the measurement items generated from the interviews as well as the literature review.

### *Images of Cruising*

Although the three open-ended questions proposed by Echtner and Richie (1993) were designed to capture different aspects of destination image, a person does not necessarily process images following the affective/cognitive typology (Li and Stepchenkova, 2012). Thus, it was believed to be useful to analyze all phrases mentioned by participants in the interviews and group them into two categories (i.e., affective images and cognitive images).

Cognitive image refers to an individual's knowledge or perception towards an object (Gartner, 1993). Participants reported various perceptions of cruising (**Table 2**), and many of the perceptions came from the movie *Titanic*. Thus, “a luxury, romantic, western and unsafe vacation” were most frequently reported. Additionally, a variety of activities, such as parties, swimming and live shows, were mentioned when they were



asked about cognitive images of cruising. It is worth noting that wrong perceptions did exist. For instance, some participants thought dining style on a cruise ship would be “fishing-cooking-eating”.

**Table 2** *Cognitive Images of Cruising from Interview*

<b>Cognitive Images</b>	<b>Counts</b>
<b>General:</b>	
Luxury and upper class vacation style	14
A western vacation style	13
Cruising is romantic and a good option for honeymoon	4
Convenient way of travel	3
Cruising is care free	3
An alternative of transportation	3
Have both transportation and vacation functions	3
Moving resort on the sea	1
<b>Entertainment:</b>	
Parties/gala dinner	9
Swimming in a pool	7
I can experience new things on a cruise	7
Live shows/concert	6
Mahjong	5
Gambling	5
Gym	4
Fishing	3
Cinema	3
KTV	3
Diving	2
Spa/message	2
Chinese tea art	2
Water skiing	2
<b>Destinations:</b>	
Exotic destinations (especially islands) excursion	7
Provide opportunities to visit new destinations	6
Opportunities to appreciate different scenery	4
Seeing sunrise and sunset	2

**Table 2** *Continued*

<b>Cognitive Images</b>	<b>Counts</b>
<b>Destinations (Continued):</b>	
Non-stop cruise	1
Easy visa process	1
<b>Food:</b>	
Seafood-oriented	6
Sophisticated/good food	5
Buffet style and can eat as much as you want	5
Not fresh (precook on land and reheat on ship)	3
Lots of food options	3
Few food options	3
Local featured recipes/food	3
Fish, cook and eat	2
Luxury restaurants	1
Western food	1
Healthy food	1
<b>Accommodation:</b>	
Limited space	7
Luxury hotel style	6
Spacious room	1
Room with sea view	1
<b>Passengers:</b>	
There will be a large number of passengers on a cruise	5
Cruise is too crowded	4
Opportunities to meet new friends	3
Passengers are distinct people/adventurers	2
Mainly young people	1
Opportunities of offline socialization (compared to social media)	1
Mainly elderly people	1
Passengers are experienced travelers	1
Opportunity to spend time with friends and family	1
Can share cruise experience with friends and family afterwards	1
<b>Cruise Ship Condition:</b>	
Large ship	8
Unsafe and unstable	5

**Table 2** *Continued*

<b>Cognitive Images</b>	<b>Counts</b>
<b>Cruise Ship Condition (Continued):</b>	
Not Clean/Clean	3
Beautiful/nice ship	1
<b>Other:</b>	
No internet	3
Good weather with nice sunshine	3
Not affordable vacation	2
Great service	1
Limited service	1

In a similar context, Park (2006) and Hung (2008) both developed cognitive image scales for cruising (**Table 3**). Similar items were found from the two scales, and one of the two similar items was removed. For example, “Cruising means a lot of food options” and “Cruising has a variety of food” had similar meanings, and the former was removed. As a result, the two scales were combined into a new one with 33 items.

**Table 3** *Measurement Scales of Cognitive Images of Cruising Used in Past Studies*

<b>Source</b>	<b>Measures</b>
Park (2006)	<i>Positive Aspects:</i>
	• I can experience new things and activities on a cruise vacation
	• I can be playful on a cruise
	• I can be calm and relaxed on a cruise
	• I can escape from the usual environment if going on a cruise vacation
	• A cruise vacation is good value-for-money
	• I will be treated well on a cruise
	• I can eat a lot of food on a cruise
	• Cruising is hassle-free
	• I can spend much time with family and friends on a cruise vacation
	• Cruise has a variety of food

**Table 3 Continued**

Source	Measures
Park (2006)	<i>Negative Aspects:</i>
	• Things are controlled too much on a cruise
	• Cruise ships impose too many rules and regulations on passengers
	• A cruise vacation is superficial
	• Cruising emphasizes food too much
	• A cruise vacation does not allow me to make my own vacation
	• Cruising is boring
	• A cruise vacation emphasizes shopping too much
	• I do not feel comfortable being on a ship filled with strangers
	• Cruising is unsafe
	• I have health-related concerns about cruises regarding outbreak or disease
	• Cruise is too crowded
	• Cruise ships are filled with the elderly
	• A cruise vacation doesn't provide enough educational programs
	• Cruise ships have confined personal space
Hung (2008)	<i>Services:</i>
	• Cruise ship staff provide excellent service
	• Cruising means lots of eating options
	• Cruise ships staff will care for my needs
	• Cruising provides me an opportunity to eat good food
	• I will have higher than average service if I go on a cruise
	<i>Space:</i>
	• Cruise ships have comfortable accommodations
	• The cabin on a cruise is spacious
	• There will be a lot of open space on a cruise ship
	• There will be a small number of passengers on a cruise
	<i>Activities:</i>
	• Cruising has a variety of activities available
	• Cruising has a wide range of itineraries for everybody
	• Cruising has good entertainment
	• Cruising provides me an opportunity to engage in activities different from those available at home

An additional 6 items were added from the results of Phase 1: “Cruise ship takes me to exotic destinations”, “I can make new friends on a cruise vacation”, “There is no Internet on a cruise ship”, “Cruising is a luxury way of vacation”, “A cruise vacation is romantic”, and “Cruising is a western style vacation”. Items were selected based on two criteria: 1) had 3 or more occurrences; and 2) not in the 33-item scale. Therefore, the resultant measurement items for cognitive images of cruising are shown in **Table 4**.

**Table 4** *Measurement Scales of Cognitive Images of Cruising*

- 
1. I can experience new things and activities on a cruise vacation
  2. I can be playful on a cruise
  3. I can be calm and relaxed on a cruise
  4. I can escape from the usual environment if going on a cruise vacation
  5. A cruise vacation is good value-for-money
  6. I will be treated well on a cruise
  7. I can eat a lot of food on a cruise
  8. Cruising is hassle-free
  9. I can spend much time with family and friends on a cruise vacation
  10. Cruise has a variety of food
  11. Things are controlled too much on a cruise
  12. Cruise ships impose too many rules and regulations on passengers
  13. A cruise vacation is superficial
  14. Cruising emphasizes food too much
  15. A cruise vacation does not allow me to make my own vacation
  16. Cruising is boring
  17. A cruise vacation emphasizes shopping too much
  18. I do not feel comfortable being on a ship filled with strangers
  19. I have health-related concerns about cruises regarding outbreak or disease
  20. Cruising is unsafe
  21. A cruise vacation doesn't provide enough educational programs
  22. Cruise ships have confined personal space
  23. Cruise ship staff provide excellent service
  24. Cruise ships staff will care for my needs
  25. Cruising provides me an opportunity to eat good food
-

**Table 4** *Continued*

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26. Cruise ships have comfortable accommodations
27. The cabin on a cruise is spacious
28. There will be a lot of open space on a cruise ship There will be a small number of passengers on a cruise
29. Cruising has a variety of activities available
30. Cruising has a wide range of itineraries for everybody
31. Cruising has good entertainment
32. Cruise ships are filled with the elderly
33. Cruise ship takes me to exotic destinations
34. I can make new friends on a cruise vacation
35. There is no Internet on a cruise ship
36. Cruising is a luxury way of vacation
37. A cruise vacation is romantic
38. Cruising is a Western style vacation

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Affective image has been defined as subjective feelings or emotional responses of an individual toward an object (Gartner, 1993). Affective items reported by participants were first identified from the transcripts, and then items with similar meanings were grouped. A total of 10 groups were generated and given a name to represent the meaning (**Table 5**). Participants reported relatively limited feelings toward cruising since none of them had cruised before. The majority of participants associated a cruise vacation with “relaxing”. Words such as “easy” and “free” were often mentioned during the interview. Interestingly, about half of the participants (7) thought that cruising was boring while the other half (8) found cruising adventurous. This indicated the diverse emotional responses among Chinese non-cruisers.

**Table 5** *Affective Images of Cruising from Interviews*

<b>Affective Images</b>	<b>Counts</b>
<b>Relaxing</b> (stress free/at easy/causal/slow/eased/leisure/free from worry/care free)	13
<b>Adventurous</b> (novel/new experience/fresh/strangers on the ship are special)	8
<b>Boring</b> (stay too long on ship/unadventurous)	7
<b>Comforting</b> (comfortable environment/good condition/cozy)	5
<b>Pleasant</b> (Happy/pleasurable)	4
<b>Lively</b> (pub/parties)	3
<b>Fun</b> (have a good time with friends and family/interesting)	2
<b>Calming</b> (a good time for thinking)	2
<b>Enjoyable</b> (enjoy the sunshine/a good time to enjoy life)	1
<b>Exciting</b> (excitement)	1

Measurement items of affective image in past studies are shown in **Table 6**.

Russell and Pratt (1980) developed four semantic differential items to measure affective images of a destination: “Arousing-Sleepy”, “Exciting-Gloomy”, “Pleasant – Unpleasant”, and “Relaxing – Distressing”, which has been widely used in destination image studies (e.g., Baloglu and McCleary, 1999; Baloglu and Love, 2005; Kim and Richardson, 2003). Based on Russell and Pratt’s (1980) scale, both Park (2006) and Hung (2008) added more items when applying the scale in a cruise context. Nine measurement items of affective image toward cruising were generated. Eight items (“Arousing-Sleepy”, “Exciting-Gloomy”, “Pleasant – Unpleasant”, “Relaxing – Distressing”, “Comforting – Uncomforting”, “Calming – Annoying”, “Enjoyable – Not Enjoyable”, and “Fun – Boring”) were from the review of literature and one item (“Adventurous – Unadventurous”) was generated from the interviews.

**Table 6** *Measurement Items of Affective Images of Cruising*

Sources/Study	Setting	Items
Russel and Pratt (1980)	Tourists Destination	1. Arousing – Sleepy 2. Exciting – Gloomy 3. Pleasant – Unpleasant 4. Relaxing – Distressing
Park (2006)	Cruising	1. Exciting – Boring 2. Pleasant – Unpleasant 3. Comforting – Uncomforting 4. Calming – Annoying 5. Enjoyable – Not Enjoyable
Hung (2008)	Cruising	1. Exciting – Gloomy 2. Pleasant – Unpleasant 3. Relaxing – Distressing 4. Comforting – Uncomforting 5. Calming – Annoying 6. Enjoyable – Not Enjoyable 7. Fun – Boring
This Study	Cruising	1. Arousing – Sleepy 2. Exciting – Gloomy 3. Pleasant – Unpleasant 4. Relaxing – Distressing 5. Comforting – Uncomforting 6. Calming – Annoying 7. Enjoyable – Not Enjoyable 8. Fun – Boring 9. Adventurous – Unadventurous

*Cruising Constraints*

Modifying Jackson and Scott's (1999) leisure constraint definition, Hung (2008, p. 111) defined cruising constraints as the factors that cause: 1) inability to maintain or increase cruising to a desired level, 2) ceasing cruising, 3) non-cruising, and/or 4) insufficient enjoyment of cruising. In a cruise context, Hung and Petrick (2010) developed a 19-item measurement scale of constraints that contained four dimensions



(**Table 7**): 1) intrapersonal constraints, 2) interpersonal constraints, 3) structural constraints, and 4) not an option.

**Table 7** *Measurement Scale of Constraints to Cruising (Hung and Petrick, 2010)*

<b>Cruising Constraints</b>
<i>Intrapersonal Constraints:</i>
<ul style="list-style-type: none"> <li>• I worry about security on a cruise ship</li> <li>• I can't cruise because I have poor health</li> <li>• I don't cruise because I have claustrophobia</li> <li>• I have sea-sickness/motion-sickness</li> <li>• I have a fear of the water/ocean</li> <li>• I need a special diet that is not available on a cruise</li> <li>• I don't cruise because my spouse/partner has poor health</li> </ul>
<i>Interpersonal Constraints:</i>
<ul style="list-style-type: none"> <li>• I might not like my dinner companions on a cruise</li> <li>• I have no companion to go on a cruise with</li> <li>• I might be lonely on a cruise</li> </ul>
<i>Structural Constraints:</i>
<ul style="list-style-type: none"> <li>• It's difficult for me to find time to cruise</li> <li>• I don't cruise due to my work responsibilities</li> <li>• I don't cruise because I have too many family obligations</li> </ul>
<i>Not an Option:</i>
<ul style="list-style-type: none"> <li>• There are many other travel alternatives that I'd like to do before cruising</li> <li>• I am not interested in cruising</li> <li>• My family/friends do not cruise</li> <li>• Cruising never occurs to me as a travel option</li> <li>• Cruising is not my family's lifestyle</li> </ul>

**Table 8** summarizes the various constraint items reported by participants. Not surprisingly, lack of time and money were two of the most frequently mentioned constraints. Likely influenced by the movie *Titanic*, most participants (10 out of 15)

considered cruising unsafe. Interpersonal constraints, such as “Cruising is not a popular vacation style”, “people that I know don’t have cruising experience” and “It is difficult to find the right people to go with”, ranked among the top factors that kept people from cruising. Moreover, three unique constraints were identified from the interviews – “cruise industry is immature in China”, “I feel guilty after taking a vacation” and “it is difficult to get cruise information”.

**Table 8** *Constraints to Cruising from Interview*

<b>Constraints</b>	<b>Counts</b>
● Lack of time	13
● Not safe	10
● Lack of money/it’s not affordable	8
● It is not a popular vacation style	7
● It’s difficult to find the right people to go with	7
● It never occur to me as a travel option	7
● People that I know don’t have cruising experience	6
● Commuting cost from home to the boarding coastal cities	6
● Cruising is risky/natural disasters	6
● Cruising is too slow	5
● I am not sure whether I have seasickness or not	5
● It’s difficult to coordinate the schedule of every friends and family	4
● It’s difficult to get cruise information	4
● I live in inland area	4
● Cruise does not belong to ordinary people	4
● Lack of interest	3
● Cruising is for old people	3
● Cruising is a waste of time	3
● Low perceived value of cruise vacation	3
● I can’t sleep well since the waves rock the cruise ship	3
● I do not have the yearn for the sea	3
● Cruise industry is immature in China	3
● I feel guilty after I take a vacation	3
● There are good and bad seasons for cruising	3

**Table 8** *Continued*

<b>Constraints</b>	<b>Counts</b>
● There is not channel to buy a ticket	2
● I don't know much about cruising	2
● There is no cruise in China	2
● I don't have the relaxing mood to cruise	2
● It takes a long time to cruise	2
● Fear of being away from land	2
● I may feel lonely when cruising	2
● Cruising is boring	2
● Not first choice	2
● I will lose the sense of security at sea	2
● Cruising does not fit my personality/lifestyle	1
● I may not be accustomed to the life at sea	1
● There are many other alternatives that I would like to do before cruising	1
● I feel uncomfortable to be surrounded by many strangers	1
● Stress from work	1
● Family responsibility	1
● No paid vacation	1
● I am interested but will do it after retire	1
● More expensive than other transportation	1
● There will be a lot of extra charge on cruise	1
● I would rather save disposable money than spend on vacation	1
● There are some negative review of cruising online	1

Based on Hung and Petrick's (2010) scale, an additional 8 items were added: 1) cruising is too expensive; 2) cruising is too slow; 3) cruise industry is immature in China; 4) I feel guilty after I take a vacation; 5) cruising belongs to upper-class; 6) cruising is not a good value-for-money; 7) it is difficult to coordinate everyone's schedule; and 8) it is difficult to get cruise information. **Table 9** shows the 26 measurement items of cruising constraints.

**Table 9** *Measurement Scale of Constraints to Cruising*

<b>Cruising Constraints</b>
1) I worry about security on a cruise ship
2) I can't cruise because I have poor health
3) I don't cruise because I have claustrophobia
4) I have sea-sickness/motion-sickness
5) I have a fear of the water/ocean
6) I need a special diet that is not available on a cruise
7) I don't cruise because my spouse/partner has poor health
8) I might not like my dinner companions on a cruise
9) I might be lonely on a cruise
10) I have no companion to go on a cruise with
11) It's difficult for me to find time to cruise
12) I don't cruise due to my work responsibilities
13) I don't cruise because I have too many family obligations
14) There are many other travel alternatives that I'd like to do before cruising
15) I am not interested in cruising
16) My family/friends do not cruise
17) Cruising never occurs to me as a travel option
18) Cruising is not my family's lifestyle
19) Cruising is too expensive
20) Cruising is too slow
21) Cruise industry is immature in China
22) I feel guilty after taking a vacation
23) Cruising belongs to upper-class
24) Cruising is not a good value-for-money
25) It is difficult to coordinate everyone's schedule
26) It is difficult to get cruise information

### ***Phase 2: Quantitative Study***

In Phase 2, quantitative data was collected to test the proposed hypotheses based on the results of Phase 1 as well as the review of literature. The target population for this study was Chinese tourists who were over 18, had never cruised before, and could afford overseas travel. Two screening questions were included during the distribution process to

ensure that respondents met the first two criteria: 1) are you over 18, and 2) have you cruised before.

Some researchers have provided rules of thumb for determining sample size. Dillman (2007) suggested that a sample size of 246 is sufficient for a homogeneous group for a 95% confidence level with 5% standard error; McNamara (1992) recommended a sample size of 384 for any size of population. In this study, sampling error was set at plus or minus 5% with a confidence level of 95%, which is a standard commonly used by tourism scholars. According to Veal (2006), sample size is crucial for the extent to which the sample precisely reflects the population, yet practically there are some criteria for determining sample size, such as the available resources. Available resources, especially connection with local travel agencies as well as research funding, were expected to be inadequate to acquire a large sample, and therefore taking all the above into account, the sample size targeted for the current study was 300. In order to increase the response rate, a key chain (**Figure 3**) was offered to respondents who had returned the questionnaire.



**Figure 3** *Incentives: Key Chains*

### **Development of Survey Instrument**

The questionnaire consisted of four sections (**Appendix 1**). In Section 1, respondents were asked about their images of cruising, including their affective images and cognitive images. In Section 2, respondents were asked about their desires and intentions to take a cruise vacation. Section 3 was associated with respondents' perceived constraints to cruising (e.g., lack of money, lack of time). In Section 4, demographics information was requested (e.g., age, gender, education level, income level). The constructs, sources of the measurement scales and the measurement scales used in the questionnaire are displayed in **Table 10**.

**Table 10** *Constructs, Sources and Measurement Scale*

<b>Construct/ Concept</b>	<b>Source</b>	<b>Questions</b>	<b>Measurement Scale</b>
Affective Image of Cruise	Phase 1; Russell and Pratt (1980); Hung (2008);	Section 1: Q2	9 items (7-point semantic differential scale): 1) Exciting-Gloomy 2) Pleasant – Unpleasant 3) Relaxing – Distressing 4) Arousing – Sleepy 5) Enjoyable – Not enjoyable 6) Comforting – Uncomforting 7) Calming – Annoying 8) Fun – Boring 9) Adventurous–Unadventurous
Cognitive Image of Cruise	Phase 1; Hung (2008); Park (2006)	Section 1: Q3	39 items (5-point scale): 1) I can experience new things and activities on a cruise vacation 2) I can be playful on a cruise 3) I can be calm and relaxed on a cruise 4) I can escape from usual environment if going on a cruise vacation 5) A cruise vacation is good value-for-money 6) I will be treated well on a cruise 7) I can eat a lot of food on a cruise 8) Cruising is hassle-free 9) I can spend much time with family and friends on a cruise vacation 10) Cruise has a variety of food 11) Things are controlled too much on a cruise 12) Cruise ships impose too many rules and regulations on passengers 13) A cruise vacation is superficial 14) Cruising emphasizes food too much

**Table 10** *Continued*

<b>Construct/ Concept</b>	<b>Source</b>	<b>Questions</b>	<b>Measurement Scale</b>
Cognitive Image of Cruise	Phase 1; Hung (2008); Park (2006)	Section 1: Q3	15) A cruise vacation does not allow me to make my own vacation
			16) Cruising is boring
			17) A cruise vacation emphasizes shopping too much
			18) I do not feel comfortable being on a ship filled with strangers
			19) I have health-related concerns about cruises outbreak or disease
			20) Cruising is unsafe
			21) A cruise vacation doesn't provide enough educational programs
			22) Cruise ships have confined personal space
			23) Cruise ship staff provide excellent service
			24) Cruise ships staff will care for my needs
			25) Cruising provides me an opportunity to eat good food
			26) Cruise ships have comfortable accommodations
			27) The cabin on a cruise is spacious
			28) There will be a lot of open space on a cruise ship
			29) There will be a small number of passengers on a cruise
			30) Cruising has a variety of activities available
			31) Cruising has a wide range of itineraries for everybody
			32) Cruising has good entertainment
			33) Cruise ships are filled with the elderly
			34) Cruise ship takes me to exotic destinations
			35) I can make new friends on a cruise vacation
			36) There is no Internet on a cruise ship
			37) Cruising is a luxury way of vacation
			38) A cruise vacation is romantic
			39) Cruising is a Western style vacation



**Table 10** *Continued*

<b>Construct/ Concept</b>	<b>Source</b>	<b>Questions</b>	<b>Measurement Scale</b>
Intentions	Lee (2005); Hung and Petrick (2012);	Section 2: Q5	5 items (5-point scale): 1) I intend to cruise next year; 2) I intend to cruise in the next 3 years; 3) I will say positive things about cruising to other people; 4) I will recommend cruising to others; 5) I will encourage friends and relatives to go on a cruise.
Desires	Perugini and Bagozzi (2001)	Section 2: Q4	2 items (11-point scale): 1) I wish to take a cruise; 2) Taking a cruise vacation is desirable to me;
Constraints to Cruising	Phase 1; Hung and Petrick (2010)	Section 3: Q6	26 items (5-point scale): 1) I worry about security on a cruise ship 2) I can't cruise because I have poor health 3) I don't cruise because I have claustrophobia 4) I have sea-sickness/motion-sickness 5) I have a fear of the water/ocean 6) I need a special diet that is not available on a cruise 7) I don't cruise because my spouse/partner has poor health 8) I might not like my dinner companions on a cruise 9) I might be lonely on a cruise 10) I have no companion to go on a cruise with 11) It's difficult for me to find time to cruise 12) I don't cruise due to my work responsibilities 13) I don't cruise because I have too many family obligations 14) There are many other travel alternatives that I'd like to do before cruising 15) I am not interested in cruising

**Table 10** *Continued*

<b>Construct/ Concept</b>	<b>Source</b>	<b>Questions</b>	<b>Measurement Scale</b>
Constraints to Cruising	Phase 1; Hung and Petrick (2010)	Section 3: Q6	16) My family/friends do not cruise 17) Cruising never occurs to me as a travel option 18) Cruising is not my family's lifestyle 19) Cruising is too expensive 20) Cruising is too slow 21) Cruise industry is immature in China 22) I feel guilty after taking a vacation 23) Cruising belongs to upper-class 24) Cruising is not a good value-for-money 25) It is difficult to coordinate everyone's schedule 26) It is difficult to get cruise information
Demographics	Li and Stepchenkova (2011)	Section 4: Q7 Q8 Q9 Q10 Q11	Nominal scale: Gender Age Education Marital Status Personal Monthly Income

The concept of Images of Cruising has been defined as individual's thoughts and feelings about cruising (Park, 2006). Items measuring affective image were mostly a combination of the scales developed by Russell and Pratt (1980) and Hung (2008). Russell and Pratt (1980) used four semantic differential items to measure the affective dimension of destination images (i.e., "Exciting-Gloomy", "Pleasant – Unpleasant", "Relaxing – Distressing", and "Arousing – Sleepy"). In a cruise context, Hung (2008) added four items to the scale (i.e., "Enjoyable – Not enjoyable", "Comforting – Uncomforting", "Calming – Annoying", and "Fun – Boring"), and an additional item ("Adventurous – Unadventurous") was added from the results of Phase 1. A seven-point scale was used.

Since there is no referable study focusing on Chinese's cognitive perceptions of cruising, an initial list of cognitive image attributes was generated from Phase 1 as well as a review of literature. A scale of 39 items resulted, with 33 of them extracted from Park's (2006) and Hung's (2008) studies and another 6 items generated from Phase 1. Respondents were asked about their level of agreement with the 39 statements pertaining to perceptions toward cruise vacations on a five-point Likert scale, anchored by 1= *strongly disagree* and 5= *strongly agree*.

Measurement of intentions to cruise was derived from Hung and Petrick (2012), which originally consisted of four items. To delineate implementation intention in terms of duration, one more item ("I intend to take a cruise next year") was added. Respondents were asked their behavioral intention to: 1) take a cruise next years; 2) take a cruise in the next 3 years; 3) recommend cruising to others; 4) encourage friends and

relatives to go on a cruise; and 5) say positive things about cruising, on a five-point scale anchored by 1= *strongly disagree* and 5= *strongly agree*.

As for the concept of desire, the scale was adapted from Perugini and Bagozzi's (2004) study. The original scale was an eleven-point semantic differential scale (1=False – 11=True) with two items: "I want to..." and "I desire to...". These two items were used to measure desire to take a cruise vacation, which asked respondents the extent to which they agree with the two statements: 1) I wish to take a cruise; 2) Taking a cruise is desirable to me, on a eleven-point scale anchored at 0= *False* and 10= *True*.

Items of cruising constraints were based on Hung and Petrick's (2010) scale of constraints to cruising and the results of Phase 1. Hung and Petrick's (2010) measurement scale had 18 items, and an additional 8 items were added to the original scale after Phase 1. A seven-point scale anchored by 1= *strongly disagree* and 5= *strongly agree* was used.

Lastly, demographic items were generated from Li and Stepchenkova's (2011) study which examined Chinese outbound tourists' destination image of America. The demographic variables included gender, age, marital status, education level and income level.

### ***Translation and Pre-test***

The questionnaire was initially developed in English, and then was professionally translated by a certified translator into simplified Chinese after measurement items were confirmed.

A pre-test was conducted online from April 21<sup>st</sup>, 2014 to April 25<sup>th</sup>, 2014. The purpose of the pre-test was to examine the question clarity, improve wording of the items and test the reliability of scales. A convenience sample was collected by sending out a Qualtrics link on Chinese social media (i.e. Wechat and Weibo) and through email to Chinese college students in the U.S. and in China. A total sample of 113 was collected, with 26 out of 113 having cruise experience and thus being excluded. Seven respondents were also excluded from the 87 non-cruisers as they did not complete the questionnaire. Thus, a total of 80 valid questionnaires were collected.

The data was entered into SPSS following the data collection. Two procedures were conducted to examine dimensionality of scales: exploratory factor analysis and reliability test. Cronbach alphas were first calculated for all scales (**Table 11**). All alphas were higher than .70, and thus, given the exploratory nature of this study, all scales were deemed acceptable, and all items were retained.

**Table 11** *Reliability Test of all Scales*

<b>Scale</b>	<b>Cronbach's Alpha</b>
Affective Images of Cruising	.919
Cognitive Images of Cruising	.818
Desire	.901
Intention	.842
Cruising Constraints	.762

### *Affective Images of Cruising*

Exploratory factor analysis with a Varimax rotation was performed on the items measuring affective images of cruising. Two factors were found. The resultant measurement items for affective images of cruising are shown in **Table 12**.

The first dimension was termed “Relaxing” which consisted of “Uncomforting – Comforting”, “Annoying – Calming”, “Distressing – Relaxing”, “Not Enjoyable – Enjoyable”, and “Unpleasant – Pleasant”. The Cronbach’s Alpha was .908.

The second dimension was labeled as “Excitement” which was comprised of “Gloomy – Exciting”, “Unadventurous – Adventurous”, “Sleepy – Arousing” and “Boring – Fun”. The Cronbach’s Alpha was .860.

**Table 12** *Cronbach’s Alpha and Factor Loading of Affective Images of Cruising*

<b>Affective Image Constructs</b>	<b>Cronbach’s Alpha</b>	<b>Factor Loading</b>
<b>Factor 1: Relaxing</b>	.908	
Uncomforting - Comforting		.864
Annoying - Calming		.845
Distressing - Relaxing		.784
Not Enjoyable - Enjoyable		.745
Unpleasant - Pleasant		.647
<b>Factor 2: Excitement</b>	.860	
Gloomy - Exciting		.806
Unadventurous - Adventurous		.804
Sleepy - Arousing		.782
Boring - Fun		.766

### *Cognitive Images of Cruising*

The same factor analysis procedures were applied to the scale measuring cognitive images of cruising. Similar to the results of affective images of cruising, exploratory factor analysis with a Varimax rotation resulted in two dimensions. Fourteen items were not included in either of the two dimensions since their factor loadings were lower than .40. However, because of the exploratory nature of this study, none of the items were eliminated from the questionnaire. The results of Cronbach's Alpha and factor loading are presented in **Table 13**.

**Table 13** *Cronbach's Alpha and Factor Loading of Images of Cruising*

Measurement Items	Cronbach's Alpha	Factor Loading
<b>Factor 1: Positive Images</b>	.836	
I can be playful on a cruise		.645
The cabin on a cruise is spacious		.600
Cruises have comfortable accommodations		.587
Cruising has good entertainment		.571
Cruising has a variety of activities available		.569
I can experience new things and activities on a cruise		.567
I will be treated well on a cruise vacation		.565
Cruising provides me an opportunity to eat good food		.549
I can make new friends on a cruise		.540
Cruise ships provide excellent service		.530
I can spend much time with friends/family on a cruise vacation		.492
I can be calm and relaxed on a cruise		.491
Cruise has a lot of food		.438
Cruising is a luxury way of vacation		.409
Cruise staff will care for my needs		.404

**Table 13** *Continued*

Measurement Items	Cronbach's Alpha	Factor Loading
<b>Factor 2: Negative Images</b>	<b>.739</b>	
Cruising is boring		.665
Cruising is unsafe		.650
I don't feel comfortable being on a ship filled with strangers		.619
Cruising focuses on shopping too much		.599
Cruising emphasizes food too much		.597
Cruising is superficial		.549
Cruising doesn't allow me to make my own vacation		.471
Things are controlled too much on a cruise		.469
There is no Internet on a cruise ship		.465
Cruise ship is filled with the elderly		.400

The first factor was named "Positive Images" with a .836 Cronbach's Alpha, and it contained 14 items: "I can be playful on a cruise", "The cabin on a cruise is spacious", "Cruises have comfortable accommodations", "Cruising has good entertainment", "Cruising has a variety of activities available", "I can experience new things and activities on a cruise", "I will be treated well on a cruise vacation", "Cruising provides me an opportunity to eat good food", "I can make new friends on a cruise vacation", "Cruise ships provide excellent service", "I can spend much time with friends/family on a cruise vacation", "I can be calm and relaxed on a cruise", "Cruise has a lot of food", "Cruising is a luxury way of vacation", and "Cruise staff will care for my needs".

The second factor was termed as "Negative Images" which consisted of 10 items: "Cruising is boring", "Cruising is unsafe", "I don't feel comfortable surrounded by many strangers on a cruise", "Cruising focuses too much on shopping", "Cruising emphasizes food too much", "Cruising is superficial", "Cruising doesn't allow me to make my own



vacation”, “Things are controlled too much on a cruise”, “There is no Internet on a cruise ship”, and “Cruise ship is filled with the elderly”. The Cronbach’s Alpha for this factor was .739.

### *Cruising Constraints*

Exploratory factor analysis with a Varimax rotation of the constraints items resulted in nine factors. However, due to small sample size, eight out of nine factors had lower than .70 Cronbach’s Alpha. Considering the exploratory nature of the pre-test, factors with larger than .50 Cronbach’s Alpha were selected. In other words, six factors resulted.

The first factor was termed as “Structural Constraints” with a .701 Cronbach’s Alpha. This factor contained four items: “It’s difficult to get cruise information”, “Cruising belongs to upper class”, “It’s difficult to coordinate everyone’s schedule”, and “Cruising is too expensive”.

The second factor was named “Time Constraints” with a .653 Cronbach’s Alpha, which was comprised of three items related to lack of time: “I don’t cruise due to work responsibility”, “It’s difficult to find time to cruise”, and “I don’t cruise because I have too many family obligations”.

The third factor was labeled as “Not an Option” and had two items: “Cruising is not my family lifestyle” and “Cruising is not a good value-for-money”. The Cronbach’s Alpha for this factor was .555.

The next factor was “Health-Related Constraints” which consisted of four items. However, “I feel guilty after taking a vacation” was removed from the scale because it

cross-loaded with factor eight (factor loading=.479), which had been removed due to low reliability, and factor 1 “Structural Constraints” (factor loading=.402). Thus, three items belonged to this factor with a .543 Cronbach’s Alpha: “I might not like dinner companions”, “I don’t cruise because my spouse/partner has poor health”, and “I don’t cruise because of my poor health”.

The fifth factor was called “Intrapersonal Constraints” which consisted of three items: “I worry about security on a cruise ship”, “I have a fear of water/ocean”, and “Cruise industry is immature in China”. This factor had a .531 Cronbach’s Alpha.

The last dimension was “Interpersonal Constraints”, and it consisted of two items: “I might feel lonely on a cruise” and “I have no companion to go on a cruise with”. Cronbach’s Alpha for this factor was .508. Details of the factor analysis results are presented in **Table 14**.

**Table 14** *Cronbach’s Alpha and Factor Loading of Cruising Constraints*

Measurement Items	Cronbach’s Alpha	Factor Loading
<b>Factor 1: Structural Constraints</b>	.701	
It’s difficult to get cruise information		.715
Cruising belongs to upper-class		.670
It’s difficult to coordinate everyone’s schedule		.628
Cruising is too expensive		.585
<b>Factor 2: Time Constraints</b>	.653	
I don’t cruise due to work responsibilities		.894
It’s difficult to find time to cruise		.751
I don’t cruise because I have too many family obligations		.522
<b>Factor 3: Not an Option</b>	.555	
Cruising is not my family lifestyle		.841
Cruising is not a good value-for-money		.665

**Table 14** *Continued*

Measurement Items	Cronbach's Alpha	Factor Loading
<b>Factor 4: Health-Related Constraints</b>	.543	
I might not like dinner companions		.758
I don't cruise because my spouse/partner has poor health		.742
I don't cruise because of poor health		.463
<b>Factor 5: Intrapersonal Constraints</b>	.531	
I worry about security on a cruise ship		.835
I have a fear of water/ocean		.605
Cruising industry is immature in China		.532
<b>Factor 6: Interpersonal Constraints</b>	.508	
I might feel lonely on a cruise		.837
I have no companion to go on a cruise with		.486

### Data Collection Procedure

Questionnaires were distributed at two travel agency stores and the international departure hall of Guangzhou Baiyun International Airport. The selected travel agencies are two of the top international travel service companies in Guangzhou: Guangdong China Travel Service Ltd. and GZL International Travel Service Ltd. Reasons for choosing travel agencies as venues included: 1) the majority of Chinese overseas travelers prefer travel agencies to help with visa application, flight reservation and hotel booking, making travel agencies a good venue to locate potential overseas travelers; and 2) since cruising is a new travel option, it is believed that potential cruisers would be likely to request information from a travel agency. In the international departure hall of the airport, most people are international travelers waiting for flight check-in or tour guides. While waiting, people were also believed to be more willing to complete a five-page questionnaire.

Data collection took place between May 13th, 2014 and May 20th, 2014. One week prior to data collection, the author observed the international departure hall and determined that traveler flow peaked from 1pm to 5pm every day for both weekdays and weekends. As for the travel agencies, observation suggested that there was a difference in customer flows between weekdays and weekends. Thus, data collection covered both weekdays and weekends. Questionnaires were distributed on a convenience basis, and thus, the sample for current study was deemed a convenience sample.

Four research assistants who are tourism-majored undergraduates from Sun Yat-Sen University helped with distributing questionnaires. Interviewer training and orientation was conducted a week before data collection. One research assistant was responsible for travel agency stores. The other three as well as the author approached travelers waiting in the international departure hall. All researchers briefly introduced the purpose of the survey and asked potential respondents to fill out the questionnaire. All research assistants were required to bring their student ID with them.

A total of 321 questionnaires were returned with 76 gathered at the travel agencies and 245 collected in the airport. Among the 321 responses, 12 questionnaires were excluded since more than two pages were not completed. This resulted in 309 valid responses. However, 61 out of 309 respondents had cruised before, and thus they were also excluded from the sample. Therefore, a total sample of 248 was used for analysis. Since 124 potential respondents rejected to participate, the response rate for this study was 72.13%.

## Data Analysis Methods

The data was analyzed using SPSS in five steps (**Table 15**). First, data was cleaned and screened by running frequency analyses. This was done to check whether there were any scores out of range for each variable and whether any outliers existed. Seven typos (for instance, a “43” in a 5-point scale and a “1086” in birth years) were found and manually corrected.

**Table 15** *Data Analysis Steps*

Step	Purpose	Analysis Methods
Step 1: Data Cleaning	- To check unusual scores and outliers	Descriptive statistics and frequency analysis
Step 2: Normality Test	- To check if data is normal distributed	Kolmogorov-Smirnov Test
Step 3: Scale Reliability	- To test the reliability of all measurement scales	Cronbach's Alpha
Step 4: Exploratory Factor Analysis	- To examine reliability and validity of scales - To examine dimensionality of constructs	KMO test, Butlett's test, Principal Component Analysis,
Step 5: Hypotheses Tests	- To test the six proposed hypotheses	Correlation, t-test and ANOVA

Second, a normality test was performed to check if the data was normal and if skewness or kurtosis occurred. A Kolmogorov-Smirnov test in SPSS revealed that the data was significantly ( $<.001$ ) not normal (**Table 16**). But further examination showed observed dependent variables had only mild ( $< \pm 2$ ) skewness and kurtosis (**Table 17**). Given that the assumption of normality is violated in most cases in social sciences

(Micerri, 1989; Lei and Lomax, 2005), it was not surprising that the data was not normally distributed.

**Table 16** *Kolmogorov-Smimov Tests of Normality*

Items	Statistics	df	Sig
I wish to take a cruise	.159	235	.000
Cruising is desirable to me	.155	234	.000
I will recommend cruising to others	.261	240	.000
I will encourage friends/family to take a cruise	.263	237	.000
I will say positive things about cruising	.246	235	.000
I intent to take a cruise next year	.276	236	.000
I intent to take a cruise in next 3 year	.224	237	.000

**Table 17** *Skewness and Kurtosis of Dependent Variables of Desire and Intention*

Items	Means	S.D.	Skewness	Kurtosis
• I wish to take a cruise	7.68	2.21	-0.931	0.601
• Cruising is desirable to me	7.32	2.38	-0.884	0.315
• I will recommend cruising to others	3.46	0.80	-0.227	0.794
• I will encourage friends/family to take a cruise	3.65	0.83	-0.622	1.175
• I will say positive things about cruising	3.46	0.83	-0.229	0.496
• I intent to take a cruise next year	3.11	0.88	0.109	0.272
• I intent to take a cruise in next 3 year	3.47	0.96	-0.459	0.118

Third, measurement scales of all concepts (i.e., images of cruising, intention, desire, cruise constraints) were checked for reliability using Cronbach's Alpha after reversing all negatively worded items. Fourth, an exploratory factor analysis was performed to examine the dimensionality of constructs of interest (i.e., images of

cruising and cruise constraints). Finally, various analysis methods were used for hypotheses testing (**Table 18**).

For the first five hypotheses, correlation was performed to determine whether a significant relationship between the two variables existed. For the last two hypotheses, t-tests and ANOVAs were conducted to determine significant differences among different socio-demographic groups.

**Table 18** *Hypotheses and Data Analysis Methods*

Hypotheses	Analysis Methods
H1a: <i>Affective Images of Cruising</i> have a significant effect on <i>Cruising Constraints</i> .	Correlation
H1b: <i>Cognitive Images of Cruising</i> have a significant effect on <i>Cruising Constraints</i> .	
H2: <i>Desire</i> positively influences <i>Intention</i> .	Correlation
H3a: <i>Affective Images of Cruising</i> significantly influence <i>Desire</i> .	Correlation
H3b: <i>Cognitive Images of Cruising</i> significantly influence <i>Desire</i> .	
H4: <i>Cruising Constraints</i> negatively influence <i>Intention</i> . The more constraints a person perceived, the less likely the person would intent to take a cruise.	Correlation
H5: <i>Cruising Constraints</i> negatively influence <i>Desire</i> . The more constraints a person perceived, the less likely the person would desire to take a cruise.	Correlation
H6a: <i>Affective Socio-demographic</i> variables (i.e., age, gender, education, marital status and income) have significant effects on <i>Images of Cruising</i> .	T-test and ANOVA
H6b: <i>Cognitive Socio-demographic</i> variables (i.e., age, gender, education, marital status and income) have significant effects on <i>Images of Cruising</i> .	
H7: <i>Socio-demographic</i> variables (i.e., age, gender, education, marital status and income) have a significant effect on <i>Cruising Constraints</i> .	T-test and ANOVA

## CHAPTER IV

### FINDINGS

A self-administered survey was conducted in Guangzhou Baiyun International Airport and two travel agency stores (i.e., Guangdong China Travel Service Ltd. and GZL International Travel Service Ltd.). Descriptive analysis was first performed in SPSS to present the sample profile, followed by exploratory factor analysis. Further, correlation analysis, t-test and ANOVA were conducted to test proposed hypotheses to examine the relationships among the constructs of interest.

#### **Demographic Profile of Respondents**

The total usable sample size was 248 with 60 from travel agency stores and 188 from an airport. As shown in **Table 19**, approximately two thirds of respondents were female (63.4%). The uneven distribution of gender was probably caused by the fact that among the 124 rejected surveys, there were more male participants than female ( $n = xx$  vs.  $xx$ ). The average age of respondents was 33.8 and ranged from 18 to 76 years old. However, almost half of all respondents were between 18 and 27. Almost all respondents were either married (54.9%) or single (44.7%), while about half (49.1%) held a college degree, followed by a junior degree (23.5%) and high school or less (13.7%). As for monthly income, almost one third of respondents had a monthly income between RMB4,000-6,999 (30.8%).



**Table 19** *Demographic Characteristics of Respondents*

	<b>Frequency</b>	<b>Percentage</b>	<b>Mean</b>
Gender			
Male	86	36.6%	
Female	149	63.4%	
Age			33.77
18-27	114	49.1%	
28-37	65	28.0%	
38-47	26	11.2%	
48-57	15	6.5%	
58-67	9	3.9%	
68+	3	1.3%	
Education			
High school or less	32	13.7%	
Technical/vocational high school	20	8.5%	
Junior college	55	23.5%	
College degree	115	49.1%	
Graduate school/advanced degree	12	5.1%	
Marital Status			
Single	105	44.7%	
Married	129	54.9%	
Divorced	1	0.4%	
Monthly Income (RMB)			
<2,000	31	13.8%	
2,000-3,999	42	18.8%	
4,000-6,999	69	30.8%	
7,000-9,999	42	18.8%	
10,000-19,999	27	12.1%	
20,000-29,999	2	0.9%	
30,000-39,999	7	3.1%	
40,000-49,999	1	0.4%	
>50,000	3	1.3%	

### Exploratory Factor Analysis

An exploratory factor analysis with a Varimax rotation was conducted to examine the dimensionality of affective images of cruising, cognitive images of cruising

and cruising constraints. The following paragraphs report the results of these factor analyses.

### ***Affective Image of Cruising***

Affective images of cruising were measured with 7-point semantic differential scales. Descriptive statistics of the nine items (**Table 20**) found that Chinese non-cruisers generally considered a cruise vacation enjoyable (mean=5.70), exciting (mean=5.60), pleasant (mean=5.61) and relaxing (mean=5.59). However, respondents thought that cruising was less adventurous as “unadventurous – adventurous” had the lowest mean (mean=5.01).

**Table 20** *Descriptive Statistics of Affective Images of Cruising*

<b>Affective Image Items</b>	<b>N</b>	<b>Mean</b>	<b>S.D.</b>
Gloomy - Exciting	225	5.60	1.122
Unpleasant - Pleasant	225	5.61	1.206
Distressing - Relaxing	226	5.59	1.374
Sleepy - Arousing	221	5.22	1.442
Uncomforting - Comforting	230	5.34	1.298
Annoying - Calming	225	5.20	1.322
Boring - Fun	228	5.48	1.282
Unadventurous - Adventurous	227	5.01	1.448
Not Enjoyable - Enjoyable	232	5.70	1.243

Before performing exploratory factor analysis, Kaiser-Meyer-Olkin’s (KMO) measure of sample adequacy and Barlett’s test of sphericity were conducted to assess the suitability of the data for factor analysis. The KMO result was satisfactory (KMO=.908) and Barlett’s test was significant ( $p<.001$ ), indicating that the data was appropriate for factor analysis. Factor analysis results suggested that no dimension was found since only

one factor has an Eigenvalue greater than 1. The Cronbach's Alpha for this factor is .913. In addition, all factor loadings were larger than .50. Thus, no items were removed based on the results.

### ***Cognitive Images of Cruising***

The cognitive images of cruising measurement scale contained 39 items. **Table 21** presents the ten cognitive image items with the highest and lowest scores. Chinese non-cruisers generally agreed that taking a cruise vacation meant opportunities to experience new things and activities (mean=3.87, excellent service (mean=3.86), a romantic vacation (mean=3.84). On the contrary, respondents less agreed that cruising was superficial (mean=2.59), filled with the elderly (mean=2.64) and boring (mean=2.72).

**Table 21** *Descriptive Statistics of Cognitive Image of Cruising*

<b>Cognitive Image Items</b>	<b>N</b>	<b>Mean</b>	<b>S.D.</b>
<i>Ten items with highest scores:</i>			
● I can experience new things and activities	237	3.87	.73
● Cruising provides excellent service	236	3.86	.77
● Cruising is romantic	239	3.84	.89
● I can escape from usual environment on a cruise	236	3.81	.79
● I can make new friends on a cruise vacation	229	3.80	.80
● There is a lot of open space on a cruise	235	3.79	.85
● I can be calm and relaxed on a cruise	237	3.78	.79
● Cruising has a variety of food	238	3.77	.86
● Cruise ships take me to exotic destinations	236	3.72	.74
● I can spend much time with friends/family on a cruise	238	3.68	.82
<i>Ten items with lowest scores:</i>			
● Cruising is superficial	238	2.59	.86
● Cruising is filled with the elderly	240	2.64	.90
● Cruising is boring	235	2.72	.87

**Table 21** *Continued*

<b>Cognitive Image Items</b>	<b>N</b>	<b>Mean</b>	<b>S.D.</b>
<i>Ten items with lowest scores(Continued):</i>			
● I don't feel comfortable being on a ship filled with strangers	237	2.82	.91
● Cruising is unsafe	237	2.90	.93
● There are a small number of passengers on a cruise	232	2.92	.81
● Cruising focuses on shopping too much	239	2.93	.82
● Cruising emphasizes food too much	238	3.05	.80
● Cruising doesn't provide enough educational programs	236	3.05	.73
● There is a wide range of itineraries available on a cruise	235	3.14	.83

The same assessment of the suitability of the factor analysis was conducted. The results showed that the KMO measure was satisfactory (KMO=.803) and that Barlett's test was significant ( $p<.001$ ). Thus, both measures indicated that the data of cognitive image of cruising was appropriate for factor analysis.

Exploratory factor analysis with a Varimax rotation extracted four factors. The first dimension was termed "Positive Images" and contained 20 items: "Cruising has a variety of food", "Cruise ships provide excellent service", "Cruising has good entertainment", "I can be playful on a cruise", "Cruising provides me an opportunity to eat good food", "I can be calm and relaxed on a cruise", "Cruising has a variety of activities available", "I can spend much time with friends/family on a cruise", "A cruise vacation is good value-for-money", "Cruise ships have a lot of open space", "Cruise staff will care for my needs", "Cruising is romantic", "I can eat a lot of food on a cruise", "I can experience new things and activities on a cruise", "I will be treated well on a cruise", "The cabin on a ship is spacious", "Cruise ships have comfortable

accommodation”, “Cruising is hassle-free”, “Cruising is a luxury way of vacation”, and “I can make new friends on a cruise”. The Cronbach’s Alpha for this factor was .891.

The second dimension that resulted from the factor analysis was termed as “Negative Images” which consisted of 13 items. They were: “Cruising is boring”, “I don’t feel comfortable being on a ship filled with strangers”, “Cruising is superficial”, “Cruise ship is filled with the elderly”, “Cruising is unsafe”, “Cruising doesn’t provide enough educational programs”, “Cruising focuses on shopping too much”, “I have health-related concerns about cruising”, “Cruise ships impose too many rules and regulations on passengers”, “Cruise ships confine personal space”, “Cruising emphasizes food too much”, “Cruising is a western way of vacation”, and “There are a small number of passengers on a cruise”. The Cronbach’s Alpha for this factor was .826.

The third factor was labeled “Negative Images about Control” which was comprised of three items: “Things are controlled too much on a cruise”, “Cruising doesn’t allow me to make my own vacation”, and “There is no Internet on a cruise”. However, since this factor had a lower than .60 Cronbach’s Alpha (Cronbach’s Alpha=.482), it was excluded from the scale due to its low reliability.

The last factor was named “Escape” and consisted of three items: “I can escape from usual environment on a cruise vacation”, “Cruise ships take me to exotic destinations”, and “Cruising has a variety range of itineraries for everyone”. This factor was deleted from cognitive image of cruising due to its low Cronbach’s Alphs (Alpha=.193). Therefore, the resulted measurement items for cognitive images of cruising are shown in **Table 22**.

**Table 22** *Factor Loading and Cronbach's Alpha of Cognitive Images of Cruising*

Measurement Items	Alpha	Factor Loading
<b>Factor 1: Positive Images</b>	.891	
• Cruising has a variety of food		.683
• Cruise ships provide excellent service		.670
• Cruising has good entertainment		.656
• I can be playful on a cruise		.653
• Cruising provides me an opportunity to eat good food		.644
• I can be calm and relaxed on a cruise		.614
• Cruising has a variety of activities available		.613
• I can spend much time with friends/family on a cruise		.592
• A cruise vacation is good value-for-money		.575
• Cruise ship has a lot of open space		.559
• Cruise staff will care for my needs		.553
• Cruising is romantic		.541
• I can eat a lot of food on a cruise		.532
• I can experience new things and activities on a cruise		.522
• I will be treated well on a cruise		.513
• The cabin on a ship is spacious		.511
• Cruise ships have comfortable accommodations		.482
• Cruising is hassle-free		.480
• Cruising is a luxury way of vacation		.463
• I can make new friends on a cruise vacation		.448
<b>Factor 2: Negative Images</b>	.826	
• Cruising is boring		.688
• I don't feel comfortable being on a ship filled with strangers		.639
• Cruising is superficial		.627
• Cruise ship is filled with the elderly		.607
• Cruising is unsafe		.604
• Cruising doesn't provide enough educational programs		.576
• Cruising focuses on shopping too much		.570
• I have health-related concerns about cruising		.541
• Cruise ships impose too many rules and regulations		.520
• Cruise ship confines personal space		.517
• Cruising emphasizes food too much		.514
• Cruising is a western style vacation		.500
• There are a small number of passengers on a cruise		.499

### ***Desire and Intention***

Desire to take a cruise was measured with two items on an 11-point scale anchored by 0=*False* and 10=*True*, and intention to cruise was measured with five items on a 5-point scale anchored with 1=*Strongly Disagree* and 5=*Strongly Agree*. The descriptive statistics demonstrated that Chinese non-cruisers had a relatively high desire to take a cruise vacation as both means were larger than 7. However, when it came to intention, respondents had less intention to cruise, especially intention to cruise next year (mean=3.11). Result details are presented in **Table 23**.

**Table 23** *Descriptive Statistics of Desire and Intention*

<b>Items</b>	<b>Mean</b>	<b>S.D.</b>	<b>Skewness</b>	<b>Kurtosis</b>
I wish to take a cruise	7.68	2.21	-.931	.601
Cruising is desirable to me	7.32	2.38	-.884	.315
I will recommend cruising to others	3.46	.80	-.227	.794
I will encourage friends/family to take a cruise	3.65	.83	-.622	1.175
I will say positive things about cruising	3.46	.83	-.229	.496
I intent to take a cruise next year	3.11	.88	.109	.272
I intent to take a cruise in next 3 year	3.47	.96	-.459	.118

### ***Cruising Constraints***

The measurement scale of cruising constraints was comprised of 26 items resulting from the literature review and Phase 1. Descriptive statistics are displayed in **Table 24**. Chinese non-cruisers' top five reasons why they don't cruise were: (1) there are many other travel alternatives before cruising (mean=3.70); (2) they worry about security (mean=3.32); (3) it's difficult to get cruise information (mean=3.31); (4)

cruising is too expensive (mean=3.29); and (5) cruising industry is immature in China (mean=3.27).

**Table 24** *Descriptive Statistics of Cruising Constraints*

<b>Cruising Constraint Items</b>	<b>N</b>	<b>Mean</b>	<b>S.D.</b>
• There are many other travel alternatives that I'd like to do before cruising	234	3.70	.79
• I worry about security on a cruise ship	235	3.32	.91
• It's difficult to get cruise information	235	3.31	1.00
• Cruising is too expensive	233	3.29	.89
• Cruise industry is immature in China	235	3.27	.92
• It's difficult to coordinate everyone's schedule	235	3.22	.92
• It's difficult for me to find time to cruise	235	3.20	.97
• I don't cruise due to my work responsibilities	233	3.09	.99
• I have no companion to go on a cruise with	237	2.97	.93
• Cruising is too slow	233	2.94	.81
• Cruising is not my family lifestyle	236	2.92	.97
• I have sea-sickness/motion-sickness	235	2.91	1.14
• My family/friends do not cruise	236	2.88	.82
• Cruising is not a good value-for-money	234	2.84	.84
• I might be lonely on a cruise	233	2.79	.84
• Cruising belongs to upper-class	233	2.78	.98
• I don't cruise because I have too many family obligations	233	2.74	.93
• Cruising never occurs to me as a travel option	233	2.72	.98
• I have a fear of water/ocean	231	2.70	1.08
• I need a special diet that is not available on a cruise	235	2.69	.82
• I might not like my dinner companions on a cruise	234	2.68	.78
• I can't cruise because I have poor health	230	2.64	.93
• I don't cruise because my spouse/partner has poor health	235	2.57	.88
• I am not interested in cruising	232	2.51	.94
• I don't cruise because I have claustrophobia	233	2.35	.99
• I feel guilty after taking vacation	235	2.31	.94



Similar to the two previous image scales, KMO measure (KMO=.856) and Barlett's test ( $p < .001$ ) suggested that the constraints data was suitable for factor analysis. Thus, an exploratory factor analysis with Varimax rotation was performed. Seven factors were initially extracted, and one item, "I don't cruise because I have too many family obligations", was removed from the scale due to low factor loadings ( $< .40$ ) across all factors. **Table 25** displays the results in details.

**Table 25** *Factor Loading and Cronbach's Alpha of Cruising Constraints*

Measurement Items	Cronbach's Alpha	Factor Loading
<b>Factor 1: Intrapersonal Constraints</b>	.719	
• I have a fear of water/ocean		.761
• I have sea-sickness/motion-sickness		.740
• I don't cruise because I have poor health		.627
• I worry about security on a cruise ship		.584
<b>Factor 2: Not an Option</b>	.743	
• I am not interested in cruising		.763
• Cruising never occurs to me as a travel option		.605
• Cruising is too slow		.605
• Cruising is not my family lifestyle		.602
• I might feel lonely on a cruise vacation		.552
<b>Factor 3: Structural Constraints</b>	.753	
• Cruising belongs to upper-class		.792
• Cruising is too expensive		.730
• Cruising is not a good value-for-money		.575
• It's difficult to coordinate everyone's schedule		.487
• My family/friends do not cruise		.440
<b>Factor 4: Time Constraints</b>	.760	
• I don't cruise due to my work responsibilities		.836
• It's difficult to find time to cruise		.829
<b>Factor 5: Psychological Constraints</b>	.738	
• I feel guilty after taking vacations		.676
• I don't cruise because I have claustrophobia		.623
• I don't cruise because my spouse has poor health		.590

The first factor was termed as “Intrapersonal Constraints” and contained four items: “I have a fear of water/ocean”, “I have sea-sickness/motion-sickness”, “I don't cruise because I have poor health”, and “I worry about security on a cruise ship”. The Cronbach’s Alpha for this factor was .719.

The second factor was labeled as “Not an Option” which consisted of five items: 1) “I am not interested in cruising”; 2) “Cruising never occurs to me as a travel option”; 3) “Cruising is too slow”; 4) “Cruising is not my family style”; and 5) “I might feel lonely on a cruise vacation”. The resultant Cronbach’s Alpha was .743.

The third dimension was “Structural Constraints” with a .753 Cronbach’s Alpha. Five items fell into this dimension: “Cruising belongs to upper class”, “Cruising is too expensive”, “Cruising is not a good value-for-money”, “It’s difficult to coordinate everyone’s schedule”, and “My family/friends don’t cruise”.

The fourth dimension was named “Time Constraints” and was comprised of two items: “I don’t cruise due to my work responsibility” and “It’s difficult for me to find time to cruise”. The Cronbach’s Alpha for this dimension was .760.

The fifth factor was “Psychological Constraints” and contained four items: “There are many other travel alternatives I would like to do before cruising”, “I feel guilty after taking vacations”, “I don’t cruise because I have claustrophobia” and “I don’t cruise because my spouse/partner has poor health”. The initial Cronbach’s Alpha for the four items was .426. However, Cronbach’s Alpha went up to .738 if one item – “There are many other travel alternatives I would like to do before cruising”, was deleted.

Thus, the fifth factor, “Psychological Constraints”, had three items with a Cronbach’s Alpha of .738.

The sixth factor was termed “Interpersonal Constraints”, which consisted of three items: “I might not like my dinner companion”, “I have no companion to go on a cruise with” and “I need a special diet that is not available on a cruise”. Since the Cronbach’s Alpha for this factor was as low as .546, it was removed from the scale.

The last factor was labeled as “Industry Immaturity”, which was comprised of two items: “Cruise industry in China is immature” and “It’s difficult to get cruise information”. The factor was deleted from the scale due to its low reliability (Cronbach’s Alpha=.489).

## **Hypotheses Testing**

One of the purposes of current study was to test the proposed seven hypotheses. The following paragraphs report the results of the testing of the hypothesized relationships among the constructs of interest.

### ***Hypothesis 1***

Hypothesis 1 examined the relationships between images of cruising and cruising constraints. It was hypothesized that for Chinese non-cruisers, both affective and cognitive images of cruising would have significant effects on Cruising Constraints.

**H1a: *Affective Images of Cruising* have a significant effect on *Cruising Constraints*.**

**H1b: *Cognitive Images of Cruising* have a significant effect on *Cruising Constraints*.**

Before performing correlation analysis, scores of affective images, cognitive images and cruising constraints were added up respectively. The correlation analysis results (**Table 26**) suggested that there was a significant but weak, negative correlation between affective images of cruising and cruising constraints ( $r=-.278$ ,  $r^2=.08$ ,  $n=179$ ,  $p<.001$ ), and that there was a significant, medium, negative correlation between cognitive image of cruising and cruising constraints ( $r=-.359$ ,  $r^2=.13$ ,  $n=163$ ,  $p<.001$ ). In further investigation, two significant and strong correlations were found, which included: Affective Image → Not an Option ( $r=-.371$ ,  $r^2=.14$ ,  $n=194$ ,  $p<.001$ ) and Cognitive Image → Not an Option ( $r=-.512$ ,  $r^2=.26$ ,  $n=178$ ,  $p<.001$ ). Therefore, hypothesis 1 was supported.

**Table 26** *Testing Results of Hypothesis 1*

Hypotheses	n	r	r <sup>2</sup>	p
Affective Image → Cruising Constraints	179	-.278	0.08	<.001*
Affective Image → Intrapersonal Constraints	192	-.229	0.05	.001*
Affective Image → Not an Option	194	<b>-.371</b>	0.14	<.001*
Affective Image → Structural Constraints	200	-.142	0.02	.045*
Affective Image → Time Constraints	201	-.123	0.02	.082
Affective Image → Psychological Constraints	200	-.150	0.02	.034*
Cognitive Image → Cruising Constraint	163	<b>-.359</b>	0.13	<.001*
Cognitive Image → Intrapersonal Constraints	173	-.226	0.05	.003*
Cognitive Image → Not an Option	178	<b>-.512</b>	0.26	<.001*
Cognitive Image → Structural Constraints	181	-.082	0.007	.271
Cognitive Image → Time Constraints	181	-.070	0.005	.350
Cognitive Image → Psychological Constraints	181	-.299	0.09	<.001*

Note: \* significant at  $p<0.05$ .

## ***Hypothesis 2***

Hypothesis 2 tested the relationship between desires and intention to take a cruise vacation. It was hypothesized that desire would positively influence intention.

### **H2: *Desires* positively influences *Intentions*.**

Similar to the procedures for testing hypothesis 1, scores of desires and intentions were added up so that correlation analysis could be performed. The hypothesized relationship was supported by the results (**Table 27**). The significant value was reported  $p < .001$  and Pearson  $r$  was reported .599, indicating a significant, strong and positive correlation between desires and intentions. Therefore, hypothesis 2 was accepted.

**Table 27** *Testing Results of Hypothesis 2*

<b>Hypotheses</b>	<b>n</b>	<b>r</b>	<b>r<sup>2</sup></b>	<b>p</b>
Desire to cruise → Intention to cruise	220	.599	.3588	<.001*

*Note:* \* significant at  $p < 0.05$ .

## ***Hypothesis 3***

Hypothesis 3 examined the relationship between images of cruising and desires to take a cruise vacation. It was expected in this study that for Chinese non-cruisers, both affective and cognitive images of cruising would significantly influence desires to take a cruise vacation.

**H3a: Affective Images of Cruising significantly influence Desire to cruise.**

**H3b: Cognitive Images of Cruising significantly influence Desire to cruise.**

The correlation output suggested that there was a significant, strong, positive correlation between affective images of cruising and desires to take a cruise vacation ( $r=.556$ ,  $r^2=.31$ ,  $n=198$ ,  $p<.001$ ), and that there was a significant, strong, positive correlation between cognitive images of cruising and desire ( $r=.552$ ,  $r^2=.30$ ,  $n=179$ ,  $p<.001$ ). Further investigation found that the two factors of cognitive images of cruising had significant effects on desire to take a cruise vacation, and particularly, a strong, positive correlation between “Positive Image” and desire to cruise ( $r=.520$ ,  $r^2=.27$ ,  $n=187$ ,  $p<.001$ ). Therefore, hypothesis 3 was accepted. **Table 28** displays the results in details.

**Table 28** *Testing Results of Hypothesis 3*

Hypotheses	n	r	r <sup>2</sup>	p
Affective Image → Desire to Cruise	198	<b>.556</b>	0.31	<.001*
Cognitive Image → Desire to Cruise	179	<b>.552</b>	0.30	<.001*
Positive Image → Desire to Cruise	187	<b>.520</b>	0.27	<.001*
Negative Image → Desire to Cruise	211	-.236	0.06	.001*

Note: \* significant at  $p<0.05$ .

#### **Hypothesis 4 and Hypothesis 5**

Hypothesis 4 and hypothesis 5 investigated the relationships between cruising constraints and desires/intentions to take a cruise vacation. It was hypothesized that there

would be a negative relationship between these three constructs, which meant that the more constraints toward taking a cruise vacation people perceived, the less likely they would desire/intend to cruise.

**H4: *Cruising Constraints* negatively influence *Intention*. The more constraints a person perceived, the less likely the person would intent to take a cruise.**

**H5: *Cruising Constraints* negatively influence *Desire*. The more constraints a person perceives, the less likely the person would desire to take a cruise.**

These relationships were also supported by the data (**Table 29**). The results indicated that there were significant, but weak, negative correlations between cruising constraints and desire/intention to take a cruise vacation. Pearson  $r$  for the correlation between constraints and desire was  $-.271$  with a significant value smaller than  $.001$ , and the Pearson  $r$  for the correlation between constraints and intention was  $-.258$  with a significant value lower than  $.001$ . Further investigation indicated that two significant and strong correlations were found which included: Not an Option  $\rightarrow$  Desire to Cruise ( $r = -.408$ ,  $r^2 = .17$ ,  $n = 214$ ,  $p < .001$ ); and 2) Not an Option  $\rightarrow$  Intention to Cruise ( $r = -.335$ ,  $r^2 = .11$ ,  $n = 215$ ,  $p < .001$ ). Therefore, hypothesis 4 and hypothesis 5 were supported.

**Table 29** *Testing Results of Hypothesis 4 and Hypothesis 5*

<b>Hypotheses</b>	<b>n</b>	<b>r</b>	<b>r<sup>2</sup></b>	<b>p</b>
Cruising Constraints → Desire to Cruise	190	-.271	0.07	<.001*
Intrapersonal Constraints → Desire to Cruise	211	-.135	0.02	.05
Not an Option → Desire to Cruise	214	<b>-.408</b>	0.17	<.001*
Structural Constraints → Desire to Cruise	221	-.021	0.00	.765
Time Constraints → Desire to Cruise	222	-.166	0.03	.013*
Psychological Constraints → Desire to Cruise	222	-.183	0.03	.006*
Cruising Constraints → Intention to Cruise	199	-.258	0.07	<.001*
Intrapersonal Constraints → Intention to Cruise	213	-.141	0.02	.04*
Not an Option → Intention to Cruise	215	<b>-.335</b>	0.11	<.001*
Structural Constraints → Intention to Cruise	221	-.130	0.02	.054
Time Constraints → Intention to Cruise	223	-.136	0.02	.042*
Psychological Constraints → Intention to Cruise	221	-.057	0.00	.400

Note: \* significant at  $p < 0.05$ .

### ***Hypothesis 6 and Hypothesis 7***

Hypothesis 6 and hypothesis 7 examined the relationships between socio-demographics and cruising constraints/images of cruising. It was hypothesized that socio-demographic variables (i.e., age, gender, education, marital status and income level) would significantly influence affective images of cruising, cognitive images of cruising and cruising constraints.

**H6a: Socio-demographic variables (i.e., age, gender, education, marital status and income) have a significant effect on *Affective Images of Cruising*.**

**H6b: Socio-demographic variables (i.e., age, gender, education, marital status and income) have a significant effect on *Cognitive Images of Cruising*.**



**H7: Socio-demographic variables (i.e., age, gender, education, marital status and income) have a significant effect on *Cruising Constraints*.**

Independent t-tests were performed to investigate whether gender had a significant effect on affective and cognitive images of cruising. The results indicated that gender did not have significant effect ( $p > .05$ ) on affective images, cognitive images of cruising or cruising constraints. Further investigation only found significant relationships between gender and time constraints ( $t=3.329$ ,  $p=.001$ ). In other words, it was found that males experienced higher time constraints than female did. **Table 30** displays the results in details.

**Table 30** *T-Testing Results of Gender and Images of Cruising/Cruising Constraints*

Hypotheses	t	df	p
Gender → Affective Images	.946	201	.345
Gender → Cognitive Images	-.501	173	.617
Gender → Positive Images	-.530	118	.597
Gender → Negative Images	.659	213	.511
Gender → Cruising Constraints	.804	188	.422
Gender → Intrapersonal Constraints	-2.285	216	0.23
Gender → Not an Option	1.351	220	0.178
Gender → Structural Constraints	.310	225	.757
Gender → Time Constraints	3.329	227	.001*
Gender → Psychological Constraints	-.076	226	.939

Note: \* significant at  $p < 0.05$ .

One-way ANOVAs were conducted to examine whether age significantly influenced affective images, cognitive images of cruising and cruising constraints. The

results showed no significant relationships ( $p > .05$ ) between age and affective, cognitive images of cruising and cruising constraints. **Table 31** demonstrates the results in details.

**Table 31** ANOVA Results of Age and Image of Cruising/Cruising Constraints

Hypotheses	F	p
Age → Affective Images	.990	.425
Age → Cognitive Images	.374	.886
Age → Positive Images	.550	.738
Age → Negative Images	1.994	.081
Age → Cruising Constraints	.850	.516
Age → Intrapersonal Constraints	1.544	.177
Age → Not an Option	.826	.532
Age → Structural Constraints	.356	.878
Age → Time Constraints	1.867	.101
Age → Psychological Constraints	1.846	.105

Note: \* significant at  $p < 0.05$ .

The same procedures (one-way ANOVA) were performed to investigate the relationships between education levels and images of cruising and cruising constraints (**Table 32**). Similar to previous results, no significant relationships ( $p > .05$ ) were found. The same conclusions were drawn after further investigation as no significant values were larger than .50 in any relationships between factors of images of cruising and of cruising constraints except for the relationships between education and Not an Option and psychological constraints. A Post hoc test showed that people who held technical/vocational degrees perceived more “Not an Option” constraints and psychological constraints than people with other educational levels. Thus, education had little influence on images of cruising or cruising constraints.

**Table 32** *ANOVA Results of Education and Image of Cruising/Cruising Constraints*

Hypotheses	F	p
Education → Affective Images	1.020	.398
Education → Cognitive Images	1.129	.334
Education → Cruising Constraints	1.690	.154
Education → Intrapersonal Constraints	.385	.819
Education → Not an Option	3.061	.018*
Education → Structural Constraints	.105	.981
Education → Time Constraints	.860	.489
Education → Psychological Constraints	3.593	.007*

Note: \* significant at  $p < 0.05$ .

Since there was only one case of divorce, it was dropped before performing analysis. Thus, t-tests were performed to examine relationships between marital status and images of cruising and cruising constraints. Again, no significant relationships ( $p > .05$ ) were found, meaning that marital status had no effects on affective images or cognitive images of cruising and cruising constraints. Further investigation only found a significant relationship between marital status and intrapersonal constraint ( $p = .032$ ), meaning that married Chinese non-cruisers perceived higher intrapersonal constraints than single non-cruisers. **Table 33** presents the results in details.

**Table 33** *T-Test Results of Marital Status and Images of Cruising/Cruising Constraints*

Hypotheses	t	df	p
Marital Status → Affective Images	-.916	200	.361
Marital Status → Cognitive Images	-.846	180	.339
Marital Status → Positive Images	-.918	188	.328
Marital Status → Negative Images	.068	212	.946
Marital Status → Cruising Constraints	-1.525	198	.129
Marital Status → Intrapersonal Constraints	-2.164	215	.032*
Marital Status → Not an Option	-.735	218	.463

Note: \* significant at  $p < 0.05$ .

**Table 33** *Continued*

<b>Hypotheses</b>	<b>t</b>	<b>df</b>	<b>p</b>
Marital Status → Structural Constraints	-.044	224	.965
Marital Status → Time Constraints	-1.735	226	.085
Marital Status → Psychological Constraints	-1.365	225	.174

*Note:* \* significant at  $p < 0.05$ .

Last but not least, one-way ANOVA analysis was conducted to examine whether income levels had significant effects on images of cruising and cruising constraints. The significant values (**Table 34**) were .846, .701, and .421 respectively, indicating that income levels had did not have significant effects on affective images, or cognitive images of cruising and cruising constraints. The same results were found in the relationships between income levels and factors of images of cruising and cruising constraints. Since none of the socio-demographic variables had a significant effect on images of cruising and cruising constraints, hypothesis 6 and hypothesis 7 were rejected.

**Table 34** *ANOVA Results of Income and Image of Cruising/Cruising Constraints*

<b>Hypotheses</b>	<b>F</b>	<b>p</b>
Income → Affective Images	.512	.846
Income → Cognitive Images	.665	.701
Income → Positive Images	.818	.574
Income → Negative Images	.836	.572
Income → Cruising Constraints	1.022	.421
Income → Intrapersonal Constraints	.890	.526
Income → Not an Option	1.138	.339
Income → Structural Constraints	1.559	.139
Income → Time Constraints	1.150	.331
Income → Psychological Constraints	.661	.725

*Note:* \* significant at  $p < 0.05$ .

## CHAPTER V

### CONCLUSIONS AND IMPLICATIONS

#### **Review of the Findings**

The purposes of current study were to examine Chinese non-cruisers' images of cruising, their cruising constraints as well as their desires/intentions to take a cruise vacation, and to test the proposed seven hypothesized relationships among the constructs of interest. The study was initiated by the observation of dramatic growth of the cruise industry in China. It was believed that identifying Chinese non-cruisers' images and constraints associated with cruising would be beneficial to understanding the potential of the market.

Given that theory would enhance understanding of the travel decision-making process, a conceptual framework was developed based on a literature review. Along with theoretical development, seven hypotheses were proposed and subsequently tested with empirical data. Before hypotheses testing, an exploratory factor analysis was performed on two interested constructs, images of cruising and cruising constraints.

Via factor analysis, three scales were analyzed. No dimensions were found in the measurement scale of affective images of cruising, but for cognitive images of cruising, two factors, "Positive Images" and "Negative Images", resulted with satisfactory Cronbach's Alphas. As for the measurement scale of cruising constraints, four factors were found: "Intrapersonal Constraints", "Not an Option", "Structural Constraints", and "Time Constraints".

**Table 35** *Results of Hypotheses Test*

	<b>Hypotheses</b>	<b>Tested Results</b>
Hypothesis 1	H1a: <i>Affective Images of Cruising</i> have a significant effect on <i>Cruising Constraints</i>	Supported
	H1b: <i>Cognitive Images of Cruising</i> have a significant effect on <i>Cruising Constraints</i>	Supported
Hypothesis 2	H2: <i>Desire</i> positively influences <i>Intention</i>	Supported
Hypothesis 3	H3a: <i>Affective Images of Cruising</i> significantly influence <i>Desire to cruise</i>	Supported
	H3b: <i>Cognitive Images of Cruising</i> significantly influence <i>Desire to cruise</i>	Supported
Hypothesis 4	H4: <i>Cruising Constraints</i> negatively influence <i>Intention</i> . The more constraints a person perceived, the less likely the person would intent to take a cruise	Supported
Hypothesis 5	H5: <i>Cruising Constraints</i> negatively influence <i>Desire</i> . The more constraints a person perceives, the less likely the person would desire to take a cruise	Supported
Hypothesis 6	H6a: <i>Socio-demographic</i> variables (i.e., age, gender, education, marital status and income) have a significant effect on <i>Affective Images of Cruising</i>	Not Supported
	H6b: <i>Socio-demographic</i> variables (i.e., age, gender, education, marital status and income) have a significant effect on <i>Cognitive Images of Cruising</i>	Not Supported
Hypothesis 7	H7: <i>Socio-demographic</i> variables (i.e., age, gender, education, marital status and income) have a significant effect on <i>Cruising Constraints</i>	Not Supported

Among the seven proposed hypotheses, five of them were supported and two hypotheses were rejected (**Table 35**). Hypothesis 1 suggested that there was a significant relationship between images of cruising and cruising constraints. This relationship was supported by the empirical data, as the correlations between affective/cognitive images

and cruising constraints were significant. In other words, in the context of Chinese non-cruisers, both affective and cognitive images of cruising seem to be affecting their perceived constraints to take a cruise vacation.

Hypothesis 2 tested the positive relationship between desires and intentions to take a cruise. This hypothesis was supported by the correlation analysis results. The significant value ( $p < .001$ ) and high Pearson  $r$  ( $r = .599$ ) indicated a significant, strong, positive correlation between desires and intentions. The significant relationship demonstrated that the more a Chinese non-cruiser desired to take a cruise vacation, the more likely he/she would intend to cruise.

The third hypothesis examined the relationship between images of cruising and desires to take a cruise vacation. This hypothesis was supported by the correlation analysis results. Significant, strong, positive correlations ( $p < .001$ ,  $r = .556$ ) between affective images and desires, and between cognitive images and desires ( $p < .001$ ,  $r = .552$ ) were found. In Further investigation found that both Positive Images and Negative Images significantly influenced desire, and a strong, positive correlation between Factor 1, “Positive Images”, and desire ( $p < .001$ ,  $r = .520$ ) was found. The results indicated that for Chinese non-cruisers, images of cruising had significant effects on desires to take a cruise vacation.

Hypothesis 4 and hypothesis 5 suggested that cruising constraints would negatively influence both desires and intentions to take a cruise vacation. The correlation results indicated that this was the case. Two significant, but weak, negative correlations

( $r=-.271$ ,  $r=-.258$ ) were found, which showed that Chinese non-cruisers' perceived cruising constraints influenced their desires and intentions to take a cruise vacation.

The last two hypotheses examined the relationships between socio-demographic variables and images of cruising and relationships between socio-demographic variables and cruising constraints. It was expected that socio-demographic characteristics would have significant effects on both desires and intentions to take a cruise vacation.

Interestingly, none of the socio-demographic variables (i.e., gender, age, education levels, marital status and income levels) were found to significantly influence desires or intentions to cruise. In other words, demographics variables were found to not be related to desires or intentions to take a cruise vacation for Chinese non-cruisers.

### **Theoretical Implications**

One major contribution of the current study is that a negative relationship between affective image and travel constraints was found in the Chinese cruise tourism context. Little previous travel constraints research had examined the reasons why people have travel constraints. This finding suggests that constraints may partly come from negative images. Given that few past studies had situated destination image in travel constraints research, this finding suggests that image is an influencer of travel constraints, and therefore it is believed the current findings broaden the spectrum of understanding travel constraints.

Further, five dimensions of cruising constraints were found: intrapersonal constraints, structural constraints, not an option, time constraints and psychological



constraints. A previous study of cruising constraints had identified the first three dimensions (Hung and Petrick, 2010; Yarnal and Kerstetter, 2005). What is missing is interpersonal constraints factor which are related to the interaction between potential participants and others. This missing factor may reflect the differences in travel decision patterns between western and eastern people. For Chinese, their travel decision is likely to be motivated by friends or family instead of internal desire, and for western people, the opposite is more likely to be the case. Thus, interpersonal constraint may not be a constraint at all in Chinese context.

Furthermore, time constraints, which are supposed to be a part of structural constraints, were an independent dimension in the Chinese non-cruisers context examined, while psychological constraints, which should be part of intrapersonal constraints, were also found as an independent dimension. Additionally, based on the correlation analysis results, “Not an Option” rather than intrapersonal constraints had more influence on desire and intention. According to Crawford and Godbey’s (1987) definition of intrapersonal constraint, both “Not an Option” and psychological should also be labeled intrapersonal constraints since these two factors intervene the formation of preference. Therefore, these findings have reaffirmed that travel constraints are not homogeneous across different contexts (Pennington-Gray and Kerstetter, 2002) and called for a better definition of intrapersonal and structural constraints in the context of travel.

Another theoretical contribution is that this study has further confirmed the influence of destination image and travel constraints on desires/intentions. Specifically,

destination image was found to positively influence desires/intentions while travel constraints were found to negatively influence desires/intentions. These findings indicated that destination image and travel constraints are two important factors influencing travel desires and intentions.

In addition, most studies have focused how destination image and travel constraints affect intention, while scant research has focused on desire. This study, following Park's (2006) dissertation, has incorporated the concept of desire in a travel decision-making process in a cruise tourism context to examine the underlying impetus of travel decision-making.

Interestingly, despite findings of significant relationships between demographic variables (i.e., gender, age, education, marital status and income level) and destination image/travel constraints in past studies, the current study found no significant differences in images and constraints among the different demographic groups in a Chinese non-cruisers context. It may imply that socio-demographics do not tell as much information of tourists as it did in the past. For example, in the past, only people with high income level can travel overseas, but now, with travel being more and more affordable, even a college student can enjoy visiting foreign countries.

This study also contributes to the destination image and leisure constraints literature by expanding it to a Chinese cruise tourism context. The results of this study suggested that there are some differences between U.S. and Chinese cruise tourism contexts in terms of travel constraints. For instance, the interpersonal constraints dimension was not found in Chinese non-cruisers' context, while Hung and Petrick

(2010) found interpersonal constraints in a U.S. context. It is believed these results have enriched the understanding of travel constraints across different cultures.

### **Practical Implications**

The documentations of images of cruising indicated that Chinese non-cruisers generally think cruising is a new, romantic and enjoyable travel experience with excellent service. These positive images of cruise vacations might be mostly influenced by the movie *Titanic*, and may be perceived as a positive indicator of the potential for international cruise lines to tap the Chinese cruise market. This image is critical for cruise product positioning because the association between the movie *Titanic* and a cruise vacation can be used for developing and marketing cruise product. For instance, romantic elements should be taken into consideration when designing activities or itineraries in order to meet Chinese non-cruisers' expectation, and advertisements such as TV ads should try to connect a cruise vacation with *Titanic* so as to effectively arousing Chinese non-cruisers' yearning to experience a *Titanic*-style vacation.

On the other hand, non-cruisers' intentions to take a cruise vacation was found to be highly constrained by other travel alternatives, their worry about security, perceived difficulty to get cruise information, price and immaturity of the industry in China. Marketers should address these constraints through some combinations of advertisements or public relations. For example, to compete with other travel options, marketers should emphasize advantages to take a cruise vacation compared to other options, such as cruise vacation is hassle-free that cruisers don't need to spend time and

efforts planning accommodation and transportation. To address the perception that cruise information is difficult to get, existing ways to get cruise information should be acknowledged by Chinese non-cruisers through travel agencies or newspaper advertisements. Meanwhile, more channels to obtain cruise vacation information, such as Chinese social media (i.e., Weibo and Wechat), should be established. As for the unsafe impressions of cruising, which have probably been affected by *Titanic* and South Korea's ferry disaster one month before the data collection, should be addressed by establishing a partnership with the International Maritime Organization – a United Nations agency who mandates global standards for the safety and operation of cruise ships.

The negative relationship between images of cruising and cruising constraints implies that marketers should understand the images that Chinese hold towards cruising, and to enhance their images of cruising in order to decrease their constraints to cruise. Take the image of safety as an example. Since many of the Chinese respondents' perceptions were likely derived from the movie *Titanic*, promotional materials could relate the image of a cruise vacation to a *Titanic* style, luxury and romantic experience and meanwhile highlight some figures pertaining to the safety of cruising. Additionally, it was found in this study that Chinese non-cruisers generally think that a cruise vacation is costly and not a good value-for-money. To address this perception, marketers should make prices transparent by listing every item and its cost so that consumers can expect what they would get for what they pay.

The significant, strong, positive correlation between affective images of cruising and desires to take a cruise vacation suggests that advertisements and promotional materials should try to arouse potential customers' subjective feelings or emotional responses towards cruising. From the results of this study, Chinese non-cruisers think a cruise vacation is enjoyable, pleasant and relaxing, and thus, advertising should reflect that people who are on a cruise feel enjoyable, pleasant and relaxing. This strategy is likely to be effective at increasing people's desire to take a cruise vacation and subsequently, intention to actually experience cruising as a positive relationship between desires and intentions was found in this study.

Five types of cruising constraints – intrapersonal constraint, structural constraints, time constraints, not an option and psychological – were found. Marketers can segment Chinese market based on these five types of constraints. Further investigation found that Chinese non-cruisers' desire and intention were mostly constrained by "Not an Option" (i.e., "I am not interested in cruising", "Cruising never occurs to me as a travel option", "Cruising is too slow", "Cruising is not my family style" and "I might feel lonely on a cruise"). For the segment of "Not an Option", marketers should conduct further marketing research or cost/benefit analysis to determine whether this segment have enough potential worth the efforts to go after.

Chinese non-cruisers were second most constrained by "Time Constraint" (i.e., "It's difficult to find time to cruise" and "I don't cruise because I have work responsibility"). This demonstrates that lack of time is likely a critical constraint, and thus, itineraries of cruise vacations might need to be shorter in China than in the U.S.

Thus it is recommended that more short cruises (3 to 4 days) should be offered to this segment.

### **Limitations of the Study**

The current study was an initial attempt to examine destination image and travel constraints in a Chinese cruise tourism context. Since the literature review and theoretical framework were based on U.S. literature, this empirical study was exploratory in nature. Results and findings should be reaffirmed by future research.

This study is limited to those who make an overseas travel inquiry and those who are waiting for an international flight in Guangzhou Baiyun International airport. Given that there is an increasing number of people who prefer to search travel information online and that people who travel overseas may connect their flights in other domestic cities such as Beijing and Shanghai, the results of this study might be generalized only to individuals who were included in this sample.

Furthermore, in Phase 1, the results suggested that there were differences in perceptions or images of cruising between people in coastal areas and people in inland areas. The study area of the current study was Guangzhou, China, which is a coastal city. Thus, the conclusions of this study should only be limited to the coastal area of China and should be generalized to other areas.

A convenience sample was utilized in this study to test the hypothesized relationships among constructs of interest. Given the insufficiency of sample size and the

convenient nature of the sample, the sample does not necessarily represent the whole Chinese non-cruiser population.

The target population of this study is Chinese non-cruisers. Since respondents had no cruise experience, they might feel difficult to answer some questions pertaining to images of cruising such as “There is no Internet on a cruise” and thus chose “neutral” as there was no “Don’t know” option in the questionnaire. Therefore, the answers might not reflect respondents’ real images/perception towards cruising.

Last but not least, Structural Equation Modelling (SEM) should be conducted to test the proposed conceptual model, but due to the author’s limited statistics techniques, the data was not fully exploited. Thus, further levels of data analysis should be performed in the future.

### **Recommendations for Future Research**

The current study focused on Chinese non-cruisers’ images and constraints towards cruising. Although most hypotheses were supported by the results, further investigation will be needed to validate the conclusions as well as the proposed conceptual framework in a Chinese, and other contexts. The same study could be conducted in some popular travel options among Chinese, such as hot springs or theme parks. Additionally, other Asian countries such as South Korea, Japan, and Taiwan should be examined in future research.

All measurements scales in this study were developed from western literature. Future research in a Chinese context could work on developing scales of destination image and travel constraints to cruising.

This study suggested that 19.74% Chinese had cruise experience (61 out of 309). It is expected that Chinese cruisers and non-cruisers are different in their perceived images and constraints toward a cruise vacation. Thus, further studies on Chinese cruisers could be valuable contributions to both theoretical and practical knowledge.



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## APPENDIX A

### INTERVIEW PROTOCOL

Time of interview:

Date:

Interviewee:

Age of interviewee:

Gender: Female Male

#### Socio-demographics Information

1. What is your education level?
2. What is your current job status?
3. What is your marital status?

#### Section 1: Images of Cruising and Desire

1. Have you heard about cruising?
2. What a cruise vacation will be like based on your perception?
3. What images or characteristics come to your mind when you think of taking a cruise vacation?
4. How would you describe the atmosphere or mood that you would expect to experience while you are on a cruise?
5. Please list any distinctive or unique tourist attractions that you can think of when you are on a cruise.

#### Section 2: Desire and Intention

1. Do you intend to cruise sometime in the future? Why or why not?
2. Do you want/desire to take a cruise vacation? Why or why not?

#### Section 3: Cruise Constraints

1. Are you interested in cruise vacation? Why or why not?
2. Why haven't you take a cruise?
3. Are there any factors (anything or anyone) which have hindered your ability to take a cruise vacation (e.g. time, money, not interested, etc.)?

## APPENDIX B

### QUESTIONNAIRE

#### **Consent Script**

We are students at Sun Yat-Sen University and Texas A&M University conducting a survey about cruise vacations to understand what prompts you to take or not to take a cruise, regardless of whether or not you have ever taken a cruise. The purpose of this survey is to examine Chinese non-cruisers' images and constraints towards taking a cruise vacation. We would appreciate it if you take **15 minutes** of your time to fill out this questionnaire about your perceptions and barriers of taking a cruise vacation. Simply mark your answers in the spaces provided below. Your participation is completely voluntary, and there will be no penalty for non-participation. You can discontinue participation at any time. Your responses are anonymous and only for academic research purpose. In return for your help, **we will give you a key chain**. Should you have any questions or concern, you can contact the research team at [zou@neo.tamu.edu](mailto:zou@neo.tamu.edu) or +1(202)351-1215, or you can also contact someone outside the research team at [irb@tamu.edu](mailto:irb@tamu.edu) or +1(979)458-4067.

## A Tourism Survey

1. Have you ever **cruised** before?

*(Cruising refers to “trips of a few days or more, and can extend to round-the-world voyages, with commercial cruise lines such as Hong Kong Star Cruises.”)*

☐ Yes (Please return the questionnaire)      ☐ No

### Section I. Perceived Images toward Cruising

2. Please circle the most appropriate number of the following pair of word to best describe your **overall image of cruise vacation**.

<b>Very Negative</b>	1	2	3	4	5	6	7	<b>Very Positive</b>
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3. Please circle the most appropriate number for each of the following pair of words to best describe your **feelings towards cruising**.

**Cruising is ...**

<b>Gloomy</b>	1	2	3	4	5	6	7	<b>Exciting</b>
<b>Unpleasant</b>	1	2	3	4	5	6	7	<b>Pleasant</b>
<b>Distressing</b>	1	2	3	4	5	6	7	<b>Relaxing</b>
<b>Sleepy</b>	1	2	3	4	5	6	7	<b>Arousing</b>
<b>Uncomforting</b>	1	2	3	4	5	6	7	<b>Comforting</b>
<b>Annoying</b>	1	2	3	4	5	6	7	<b>Calming</b>
<b>Boring</b>	1	2	3	4	5	6	7	<b>Fun</b>
<b>Unadventurous</b>	1	2	3	4	5	6	7	<b>Adventurous</b>
<b>Not Enjoyable</b>	1	2	3	4	5	6	7	<b>Enjoyable</b>

4. Please indicate the extent to which you agree or disagree with the following statements by circling an appropriate number.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Cruise ships provide excellent service	1	2	3	4	5
Cruising is a convenient way of travel	1	2	3	4	5
Cruise ship takes me to exotic destinations	1	2	3	4	5
I can make new friends on a cruise vacation	1	2	3	4	5
I can experience new things and activities on a cruise	1	2	3	4	5
I will be treated well on a cruise	1	2	3	4	5
Things are controlled too much on a cruise	1	2	3	4	5
There is no internet on a cruise ship	1	2	3	4	5
Cruising is a luxury way of vacation	1	2	3	4	5
There will be a small number of passengers on a cruise.	1	2	3	4	5
Cruising emphasizes food too much	1	2	3	4	5
Cruising has a variety of activities available	1	2	3	4	5
Cruise ship staff will care for my needs	1	2	3	4	5
Cruising has a wide range of itineraries for everybody	1	2	3	4	5
A cruise vacation is superficial	1	2	3	4	5
Cruising has good entertainment	1	2	3	4	5
I can eat a lot of food on a cruise	1	2	3	4	5
I don't feel comfortable being on a ship filled with strangers	1	2	3	4	5
Cruising is unsafe	1	2	3	4	5
The cabin on a cruise is spacious	1	2	3	4	5
I can be playful on a cruise	1	2	3	4	5
Cruising provides me an opportunity to eat good food	1	2	3	4	5
Cruise ships impose too many rules and regulations on passengers	1	2	3	4	5
A cruise vacation is hassle-free	1	2	3	4	5
Cruise ships are filled with the elderly	1	2	3	4	5
I can spend much time with family and	1	2	3	4	5



friends on a cruise vacation					
There is a lot of open space on a cruise ship	1	2	3	4	5
I can be calm and relaxed on a cruise	1	2	3	4	5
I can escape from the usual environment if going on a cruise vacation	1	2	3	4	5
I have health-related concerns about cruises regarding outbreak or diseases	1	2	3	4	5
Cruise ships have confined personal space	1	2	3	4	5
A cruise vacation is good value-for-money	1	2	3	4	5
Cruising is boring	1	2	3	4	5
A cruise vacation focuses on shopping too much	1	2	3	4	5
A cruise vacation doesn't provide enough educational programs	1	2	3	4	5
A cruise vacation doesn't allow me to make my own vacation experience	1	2	3	4	5
A cruise vacation is romantic	1	2	3	4	5
Cruising is a western style vacation	1	2	3	4	5
Cruise ships have comfortable accommodations	1	2	3	4	5

## Section II. Desire and Intention to Take a Cruise

5. Please indicate the extent to which you agree or disagree with the following statements by circling an appropriate number.

	False										True
I wish to take a cruise	0	1	2	3	4	5	6	7	8	9	10
Taking a cruise is desirable to me	0	1	2	3	4	5	6	7	8	9	10

6. Please indicate the extent to which you agree or disagree with the following statements by circling an appropriate number.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I intend to cruise next year	1	2	3	4	5
I intend to cruise in the next 3 years	1	2	3	4	5
I will recommend cruising to others	1	2	3	4	5
I will encourage friends and relatives to go on a cruise	1	2	3	4	5
I will say positive things about cruising to other people	1	2	3	4	5

7. What is the most important reason that you would take a cruise vacation?

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8. What is the most important reason that you would *NOT* take a cruise vacation?

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### Section III. Constraints to Cruising

9. Please indicate the extent to which you agree or disagree with the following statements by circling an appropriate number.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I worry about security on a cruise ship	1	2	3	4	5
I can't cruise because I have poor health	1	2	3	4	5
Cruising is too slow	1	2	3	4	5
I have sea-sickness/motion-sickness	1	2	3	4	5
I have a fear of the water/ocean	1	2	3	4	5
I need a special diet that is not available on a cruise	1	2	3	4	5
I don't cruise because my spouse/partner has poor health	1	2	3	4	5
I might not like my dinner companions on a cruise	1	2	3	4	5
I have no companion to go on a cruise with	1	2	3	4	5
I am not interested in cruising	1	2	3	4	5
It's difficult for me to find time to cruise	1	2	3	4	5
I don't cruise due to my work responsibilities	1	2	3	4	5
Cruising is not my family's lifestyle	1	2	3	4	5
Cruising is too expensive	1	2	3	4	5
There are many other travel alternatives that I'd like to do before cruising	1	2	3	4	5
I might be lonely on a cruise	1	2	3	4	5
My family/friend do not cruise	1	2	3	4	5
Cruising never occur to me as a travel option	1	2	3	4	5
I don't cruise because I have too many family obligations	1	2	3	4	5
I don't cruise because I have claustrophobia	1	2	3	4	5
Cruise industry is immature in China	1	2	3	4	5
I feel guilty after I take a vacation	1	2	3	4	5

Cruising belongs to upper class	1	2	3	4	5
Cruising is not a good value-for-money	1	2	3	4	5
It is difficult to coordinate everyone's schedule	1	2	3	4	5
It's difficult to get cruise information	1	2	3	4	5

**Other** (Please specify and rate):

1 2 3 4 5

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#### Section IV. Background Information

10. Are you? ☐ Male ☐ Female

11. What year were you born? 19\_\_\_\_\_

12. What is the highest level of formal education you have completed?

- ☐ High School or less
- ☐ Technical/vocational high school
- ☐ Junior college
- ☐ College degree
- ☐ Graduate school/advanced degree

13. What is your marital status?

- ☐ Single
- ☐ Married
- ☐ Divorced
- ☐ Separated
- ☐ Widowed

14. What is your approximate monthly income?

- ☐ <¥2,000 (<\$334)
- ☐ ¥2,000-¥3,999 (\$334-\$667)
- ☐ ¥4,000-¥6,999 (\$668-\$1,167)
- ☐ ¥7,000-¥9,999 (\$1,168-\$1,667)
- ☐ ¥10,000-¥19,999 (\$1,668-\$3,333)
- ☐ ¥20,000-¥29,999 (\$3,334-\$5,000)
- ☐ ¥30,000-¥39,999 (\$5,001-\$6,667)
- ☐ ¥40,000-¥49,999 (\$6,668-\$8,333)
- ☐ >¥50,000 (>\$8,334)

**Thank you for completing our survey. We sincerely appreciate your responses!**

Please return this questionnaire to Sen Yat-Sen University students administering the survey.